

Summary

Contents

CONTENTS



Feature Article

Water and energy efficiency elements of households in older and newer dwellings



Spotlight On:

Short term overseas visitors arrivals, Victoria 2009

Population ageing in Victoria



State Comparison

Includes: **Summary of statistical indicators**



Population

Includes: **Estimated resident population, Australian historical population statistics**



Work and Income

Includes: **Revisions to population benchmarks, Labour Force Survey standard products and data item guide, Statistical significance of movements and other comparisons, Civilian labour force by Region, Employed persons by Industry, Employed persons by Occupation, Part-time workers, Duration of unemployment, Small area unemployment rate estimates, Average weekly earnings**



State Final Demand

Includes: **State final demand**



Price Indexes

Includes: **Consumer Price Index, House price indexes**



Construction

Includes: **Building approvals, Engineering construction activity**



Tourism

Includes: **Tourist accommodation**



Agriculture

Includes: **Livestock slaughtering and meat production, Other Agricultural Production**



Trade

Includes: **Confidentiality of merchandise trade statistics, International merchandise trade - Export data commodity prices adjustment, Balance of merchandise trade, Trade by Commodity, Major trading partners**



Environment

Includes: **Air quality, Water resources**

In this issue

NOTES

FORTHCOMING ISSUES

ISSUE (QUARTER)

September 2010

December 2010

Release Date

19 November 2010

21 February 2011

NOTE

State and Regional Indicators, Victoria provides a summary of statistical information for Victoria at the state and/or regional level. Statistical highlights are included in each chapter, along with commentary, graphs and maps on selected indicators.

This issue contains a feature article titled Water and energy efficiency elements of households in older and newer dwellings.

The statistics presented in this issue are the latest available as at 6 August 2010, with one exception. The table containing quarterly agricultural production data is presented on a common reference period for all data items. Live sheep exports data for June quarter 2010 were available at this date, but they have not been included as the remaining data in the table were not yet available for that period.

Please address feedback to:

Post: Manager, Victorian Statistical Analytical Services Section
Statistical Capability Development Branch
Australian Bureau of Statistics
PO Box 2796Y
Melbourne Vic 3001
Email: <victoria.statistics@abs.gov.au>
Fax: (03) 9615 7002

CHANGES IN THIS ISSUE

State and Regional Indicators, Victoria is released on a quarterly basis with chapters updated when new data are available. Chapters and tables are only included when new data are available, so the number of chapters and tables may vary between issues.

A new chapter 'Spotlight On' has been added to the publication. Including in this chapter are two short articles: 'Ageing population in Victoria' and 'Short term overseas visitor arrivals, Victoria'.

Changes have been made to the Civilian Labour Force and the Part time Workers sections of the Work and income chapter.

Two tables: 'Condition of VicRoads Network, By Local Government Area - 2007-08' and 'Road Traffic Fatalities and Injuries, By Local Government Area' were expected to be published in this issue of the publication, however the data are not yet available.

EXPLANATORY NOTES

Explanatory notes in the form found in other ABS publications are not included in **State and Regional Indicators, Victoria**. For detailed information on the statistics, users are directed to the Explanatory notes contained in related ABS publications.

Users are advised that small area estimates presented in this publication should be used with care.

Due to rounding, discrepancies may occur between sums of the component items and totals in individual tables, and between totals in related tables.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Katie Timmins on Melbourne (03) 9615 7652.

List of Historical Feature Articles

For issues prior to September 2007, feature articles are only available as part of the original PDF publication and the links below will open the applicable PDF publication.

For issues since September 2007, feature articles are available in HTML format. Up until the March 2009 issue, the articles can also be accessed as part of the original PDF publication.

Issue	Title
Dec 2009	Living Arrangements of Victorians, 2006 — A Study of Diversity and Change Across the Life Courses
Jun 2009	Surplus Bedrooms in Melbourne Homes
Mar 2009	Measuring Victoria's Population
Sep 2008	Victorian Household Preparedness for Emergencies
Jun 2008	Adult Literacy and Life Skills
Mar 2008	Workplace Growth in Victoria 2000-2007
Dec 2007	Child Care Usage in Victoria
Sep 2007	2006 Census: Regional Victoria in Profile
Jun 2007	Water — Sources and Usages
Jun 2007	Personal Safety Survey
Mar 2007	Workplace Growth 2003–2005
Dec 2006	Waste and Recycling
Sep 2006	Trends in Fertility
Jun 2006	Indigenous Vital Statistics
Mar 2006	Victorian Community Indicators
Dec 2005	Profile of Seniors in Victorians
Sep 2005	The Victorian Population 1836–2005
Jun 2005	Criminal Court Outcomes 2003–2004
Sep 2004	Summary of Findings from the 2002 National Aboriginal and Torres Strait Islander Survey
Jun 2004	Building Activity and Interest Rates
Mar 2004	Children aged 0-8 years in Victoria
Sep 2003	Estimating Workplace Growth from Workcover data
Jun 2003	Housing Trends in Melbourne 1999–2002
Sep 2002	Population Change in Victoria, 1991–2001
Jun 2002	2001 Census Geography Issues
Mar 2002	Part-time Employment in Victoria

About this Release

State and Regional Indicators, Victoria (SRIV) is a quarterly publication that contains recently released statistical information about the whole of Victoria. Data is sourced from ABS and non-ABS collections. It provides measures according to a triple bottom line of economic, social and environment elements.

Most chapters contain a mix of tables, charts and commentary, to provide a basic analysis of recent movements in key economic, social and environmental data. Data is presented for varying geographic classifications, including, Victoria; Melbourne and the Balance of Victoria; down to Local Government Area for some series. The aim of the publication is to provide a picture of the situation of Victoria and enable comparison, both over time and between regions.

Core data, such as Estimated Resident Population, State Final Demand, Labour Force Statistics, Price Indexes, Building Approvals, Air Quality, and Water Storage Volumes is complemented by periodic annual data including the Condition of VicRoads Network, Recorded Crime Offences, Life Expectancy at Birth, Government Owned Housing Stock and others.

As the information is sourced from a wide variety of collections, care needs to be taken when analysing the data as time periods, definitions, methodologies, scope and coverage may differ from table to table. Advice is provided in the publication on such matters.

Expanded Contents

CONTENTS

Spotlight On:

- Short term overseas visitor arrivals, Victoria 2009
- Population ageing in Victoria
- State Comparison
 - Summary of statistical indicators
- Population
 - Estimated resident population
 - Australian historical population statistics
- Work and Income
 - Revisions to population benchmarks
 - Labour Force Survey standard products and data item guide
 - Statistical significance of movements and other comparisons
 - Civilian labour force by Region
 - Employed persons by Industry
 - Employed persons by Occupation
 - Part-time workers
 - Duration of unemployment
 - Small area unemployment rate estimates
 - Average weekly earnings
- State Final Demand
 - State final demand
- Price Indexes
 - Consumer Price Index
 - House price indexes
- Construction
 - Building approvals
 - Engineering construction activity
- Tourism
 - Tourist accommodation
- Agriculture
 - Livestock slaughtering and meat production
 - Other Agricultural Production
- Trade
 - Confidentiality of merchandise trade statistics
 - International merchandise trade - Export data commodity prices adjustment
 - Balance of merchandise trade
 - Trade by Commodity
 - Major trading partners
- Environment
 - Air quality
 - Water resources

Spotlight On:

Contents >> Spotlight On:



SPOTLIGHT ON:

This section contains the following subsection :
 Short term overseas visitor arrivals, Victoria 2009
 Population ageing in Victoria

[Previous Page](#)

[Next Page](#)

Short term overseas visitor arrivals, Victoria 2009

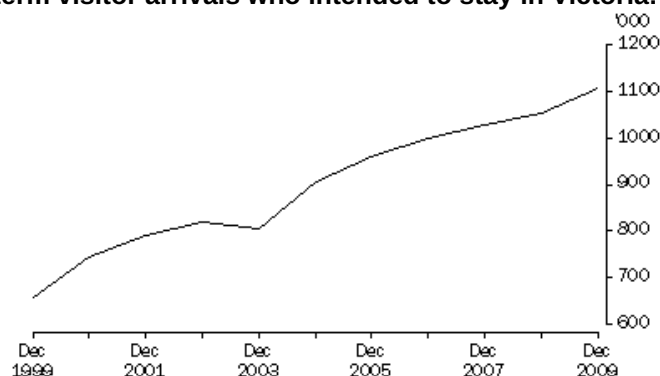
[Contents >> Spotlight On: >> Short term overseas visitor arrivals, Victoria 2009](#)

SHORT TERM OVERSEAS VISITOR ARRIVALS, VICTORIA 2009

For the year ended December 2009, there were 5.58 million short-term overseas visitor arrivals to Australia. Of these arrivals, 19.8% nominated Victoria as their intended state of stay while in Australia. This article focuses on the short-term visitor arrivals to Australia where Victoria was recorded as the visitor's intended state of stay on the incoming passenger card. Short-term visitor arrivals have an intended duration of stay in Australia of less than one year. It is noted that overseas arrivals and departures statistics relate to the number of movements of travellers rather than the number of travellers. For more information see the publication [Overseas Arrivals and Departures, Australia, Dec 2009](#) (cat. no. 3401.0) [Explanatory Notes](#).

For the year ended December 2009, 1.11 million short-term visitors arrived in Australia with an intention to stay in Victoria. This was slightly higher than the recorded number of visitors who intended to stay in Victoria for the year ended December 2008 (1.05 million). Ten years ago (1999), there were 4.46 million short-term visitor arrivals to Australia, and 657,400 (14.7%) of those visitors intended to stay in Victoria. The proportion of short-term visitor arrivals nominating Victoria as their intended state of stay has increased by 5.1 percentage points between 1999 and 2009.

Short-term visitor arrivals who intended to stay in Victoria: Original



The following table shows, for selected years, the top ten countries of residence (based on 2009) for short-term visitor arrivals who nominated Victoria as their intended state of stay while in Australia. For each of the periods, New Zealand was the largest contributor (20.4% in 2009). United Kingdom, Channel Islands & Isle of Man was the second highest contributor for each of the periods (10.2% in 2009). Of the top ten countries of residence for short-term visitor arrivals who intended to stay in Victoria, India recorded the strongest growth in arrivals over the period, increasing from 1.2% in 1999 to 4.1% in 2009.

1.1 Short-term visitor arrivals who intended to stay in Victoria: Calendar years

Country of residence(a)	1999		2004		2009	
	'000	%	'000	%	'000	%
New Zealand	124.6	18.9	203.3	22.4	225.8	20.4
UK, CIs & IOM(b)	74.2	11.3	107.5	11.9	113.5	10.2
China (excludes SARs and Taiwan Province)	21.1	3.2	74.5	8.2	107.9	9.7
United States of America	71.3	10.8	78.3	8.6	86.6	7.8
Malaysia	28.1	4.3	45.8	5.1	70.7	6.4
Singapore	50.7	7.7	57.0	6.3	67.0	6.0
India	7.6	1.2	15.9	1.8	45.9	4.1
Hong Kong (SAR of China)	20.8	3.2	29.0	3.2	34.0	3.1
Indonesia	20.9	3.2	23.0	2.5	31.1	2.8
Japan	48.0	7.3	51.6	5.7	30.7	2.8

All other countries	190.1	28.9	220.1	24.3	294.9	26.6
Total	657.4	100.0	905.8	100.0	1 108.0	100.0

(a) Top 10 source countries based on original estimates.

(b) United Kingdom, Channel Islands and Isle of Man.

In 1999 the peak age group for all short-term visitors who arrived in Australia and intended to stay in Victoria was 25-29 years (11.4%). In 2009, both the 20-24 and 25-29 year age groups recorded the highest proportion (11.2% each).

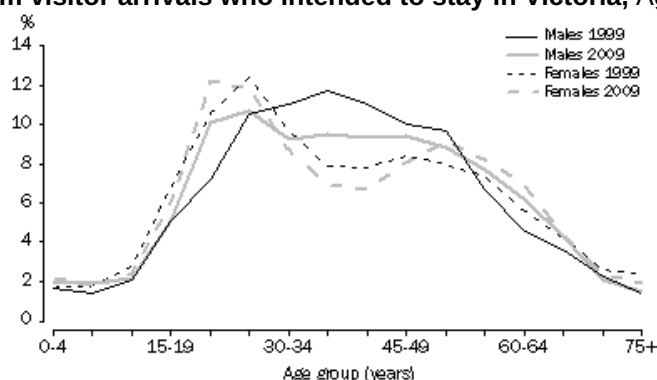
The proportion of people travelling to Australia and intending to stay in Victoria is increasing among older age groups. The proportion arriving and intending to stay in Victoria in the 50-69 year age group increased from 24.8% in 1999 to 27.9% in 2009. Conversely, the proportion of people in the 25-49 year age group decreased from 50.6% in 1999 to 45.2% in 2009. The median age of all short-term visitor arrivals who intended to stay in Victoria was 39 years in 2009.

1.2 Short-term visitor arrivals who intended to stay in Victoria: Calendar years

Age group (years)	1999 '000	%	2004 '000	%	2009 '000	%
0-4	11.1	1.7	16.2	1.8	23.3	2.1
5-9	10.2	1.6	17.6	1.9	20.8	1.9
10-14	16.0	2.4	24.8	2.7	25.4	2.3
15-19	38.5	5.9	50.0	5.5	61.7	5.6
20-24	57.6	8.8	84.6	9.3	123.6	11.2
25-29	74.8	11.4	88.2	9.7	124.6	11.2
30-34	68.5	10.4	92.0	10.2	99.0	8.9
35-39	65.4	10.0	85.8	9.5	91.4	8.2
40-44	62.7	9.5	87.9	9.7	88.7	8.0
45-49	61.0	9.3	86.4	9.5	97.0	8.7
50-54	58.7	8.9	82.5	9.1	99.6	9.0
55-59	45.7	7.0	73.9	8.2	88.5	8.0
60-64	33.1	5.0	47.9	5.3	72.7	6.6
65-69	25.5	3.9	33.3	3.7	47.9	4.3
70-74	16.1	2.4	20.0	2.2	25.3	2.3
75 and over	12.4	1.9	14.6	1.6	18.6	1.7
Total	657.4	100.0	905.8	100.0	1 108.0	100.0

For male short-term overseas visitors arriving who intended to stay in Victoria, the peak age group moved from 35-39 years in 1999 (11.7%) to the younger 25-29 year age group in 2009 (10.7%). For females, the peak age group moved from 25-29 years in 1999 (12.4%) to the younger 20-24 year age group in 2009 (12.2%). The median age of male visitors decreased from 39.7 years in 1999 to 39.6 years in 2009. Conversely, the median age of female visitors who intended to stay in Victoria increased from 37.8 years in 1999 to 38.3 years in 2009.

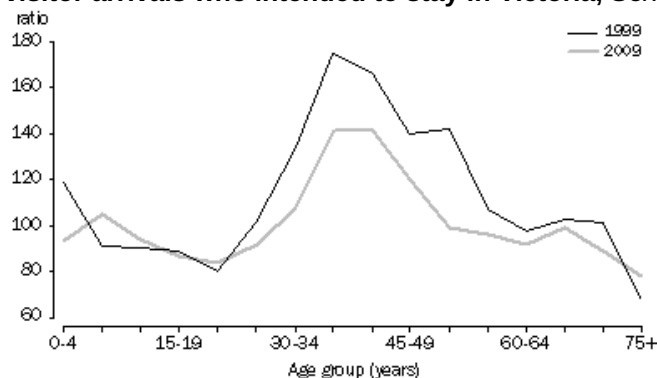
Short-term visitor arrivals who intended to stay in Victoria, Age and sex



Between 1999 and 2009, the total annual number of male short-term visitors intending to stay in Victoria was higher than the total annual number of female short-term visitors. The short-term visitor arrival sex ratio (the number of male arrivals who intended to stay in Victoria per 100 female arrivals who intended to stay in Victoria) was 118 males in 1999 compared with 102 males in 2009. The highest sex ratio was recorded in the 35-39 year age group in 1999 (175 males). In 2009, both the 35-39 and 40-44 year age groups had the same highest sex ratio of 141 males.

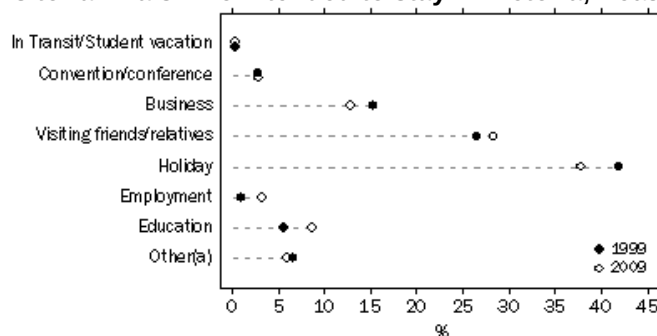
For intended visitors to Victoria the lowest sex ratios were in the 75 years and over age group (68 males in 1999 and 78 males in 2009). The 20-24 year age group had the second lowest sex ratios (80 males in 1999 and 84 males in 2009). The following graph illustrates the sex ratios at each age group for short-term visitor arrivals to Australia who intended to stay in Victoria.

Short-term visitor arrivals who intended to stay in Victoria, Sex ratios at age



For the year ended December 2009, short-term visitor arrivals who intended to stay in Victoria, stated the main reason for journey as holiday (37.9%), visiting friends and relatives (28.3%) and business (12.8%). In comparison, for the year ended December 1999, the main reasons for journey were holiday (41.9%), visiting friends and relatives (26.5%) and business (15.3%). The median duration of stay for all short-term visitor arrivals who intended to stay in Victoria, was 11 days in both 1999 and 2009.

Short-term visitor arrivals who intended to stay in Victoria, Reason for journey



(a) Includes Not Stated and Not Applicable

Statistical Notes

The above presentation of movements in estimates does not take into account whether the change in movement is statistically significant. Care should be taken when interpreting the impact of numeric and/or percentage change. For more information, refer to [Overseas Arrivals and Departures, Australia, Dec 2009](#) (cat. no. 3401.0) [Explanatory Notes - Standard Errors](#).

All analysis, graphs and tables in the above article are based on Original Series estimates.

[Previous Page](#)

[Next Page](#)

Population ageing in Victoria

[Contents >> Spotlight On: >> Population ageing in Victoria](#)

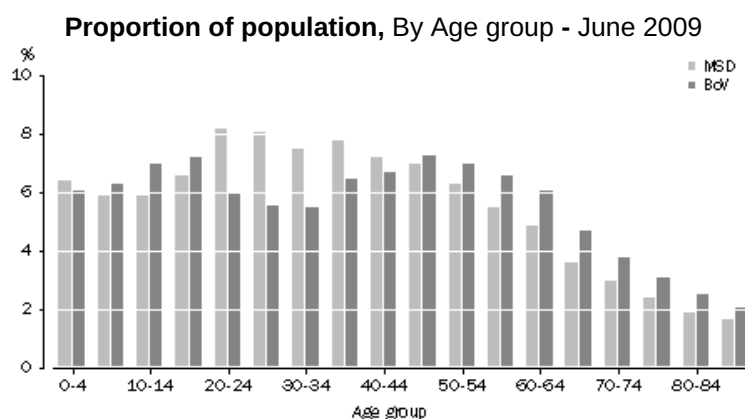
POPULATION AGEING IN VICTORIA

Population ageing is an issue of national interest, and the trend of structural population ageing has been occurring in both Australia and Victoria as the median age of the population increases. Population ageing is characterised by an upwards shift in the age structure, with the proportion of younger people declining as the proportion of older people increases. At 30 June 2009, 13.6% of the population of Victoria was aged 65 years and over (Population by Age and Sex, Regions of Australia, 2009, cat. no. 3235.0) and this figure is expected to reach 23.1% in 2056 (Population Projections, Australia 2006-2101, cat. no. 3222.0, Series B). These proportions are greater outside of the Melbourne Statistical Division (MSD), where at June 2009, 16.2% of the population was aged 65 years and over, and by 2056, that proportion is projected to increase to 29.3% of the population.

Age Composition

The age composition of the Victorian population has changed in recent years. The graph below shows the proportion of population by age group for MSD and Balance of Victoria (BoV). It shows a higher proportion of the population in BoV are aged 45 years and over, when compared to MSD. Whereas, for people aged between 20 and 44 years the proportion of population is higher in MSD. At 30 June 2009, 12.6% of the population in MSD were aged 65 years and over compared to 16.2% of the population in BoV. Over the five years since 30 June 2004, the proportion of population aged 65 years and over in MSD increased by 0.2 percentage points compared to 1.0 percentage point in BoV, an indication that the population of BoV is ageing faster.

In contrast, the proportion of children (aged 0-14) declined in both regions. Although the proportion of children was higher in BoV (19.4%) compared to MSD (18.2%) as at 30 June 2009, between 2004 and 2009 it declined faster in BoV, than in MSD (-1.5 and -0.7 percentage points, respectively).

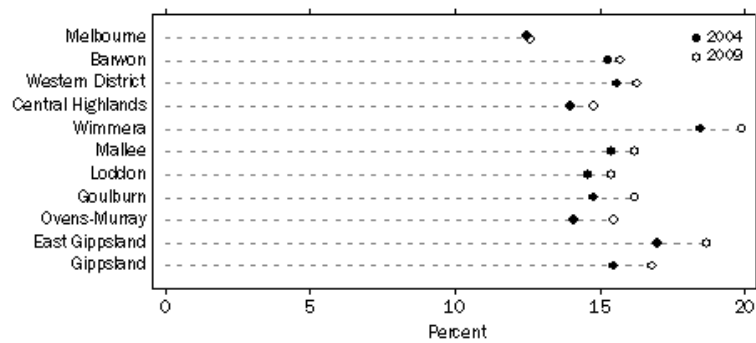


Source: *Population by Age and Sex, Regions of Australia, 2009* (3235.0).

The proportion of population aged 65 years and over varied among Statistical Divisions (SDs) in Victoria. In both 2004 and 2009, MSD recorded the lowest proportion of people aged 65 years and over (12.5% in 2004 and 12.6% in 2009). In both periods, the largest proportions of population aged 65 years and over were recorded in Wimmera and East Gippsland. In 2009, Wimmera had the highest proportion (19.9%) of population aged 65 years and over.

Between 2004 and 2009, all SDs experienced an increase in the proportion of population aged 65 years and over. The East Gippsland SD experienced the largest increase (1.7 percentage points) in proportion of population aged 65 years and over followed by Ovens Murray (1.4), and Goulburn and Gippsland (both 1.3). The smallest increases were experienced by Melbourne (0.2 percentage points), Barwon (0.4) and Western District (0.7).

Proportion of population aged 65 years and over, By Statistical Division

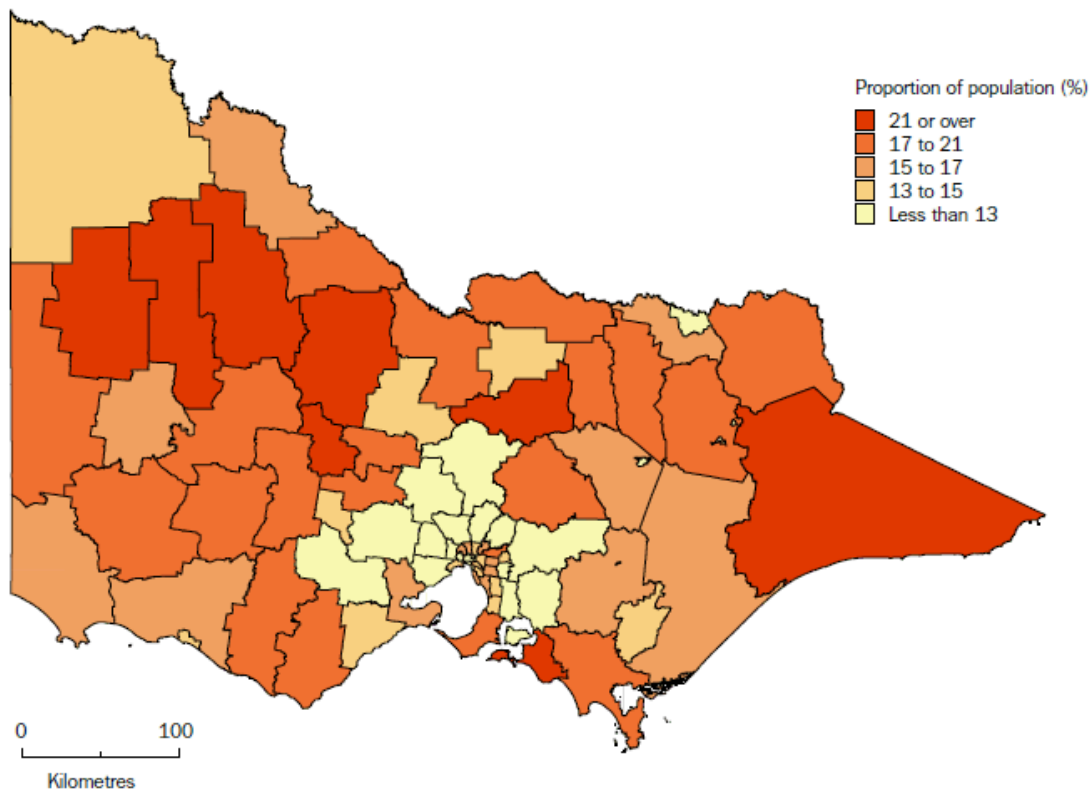


Source: Population by Age and Sex, Regions of Australia, 2009, cat. no. 3235.0).

Among Victoria's Local Government Areas (LGAs) the highest proportion of people aged 65 years and over at 30 June 2009 was recorded in Queenscliffe (B) (32.4%) followed by Hindmarsh (S) (24.9%) and Yarriambiack (S) (24.4%). Queenscliffe also recorded the highest proportion (30.0%) in 2004. The fifteen LGAs with the highest proportion of people age 65 years and over are all located in BoV. Melbourne (C) (5.6%), Melton (S) (5.9%) and Wyndham (C) (6.0%) recorded the lowest proportion of persons people aged 65 years and over in 2009.

Proportion of Population Aged 65 Years and Over, Victoria, 2009

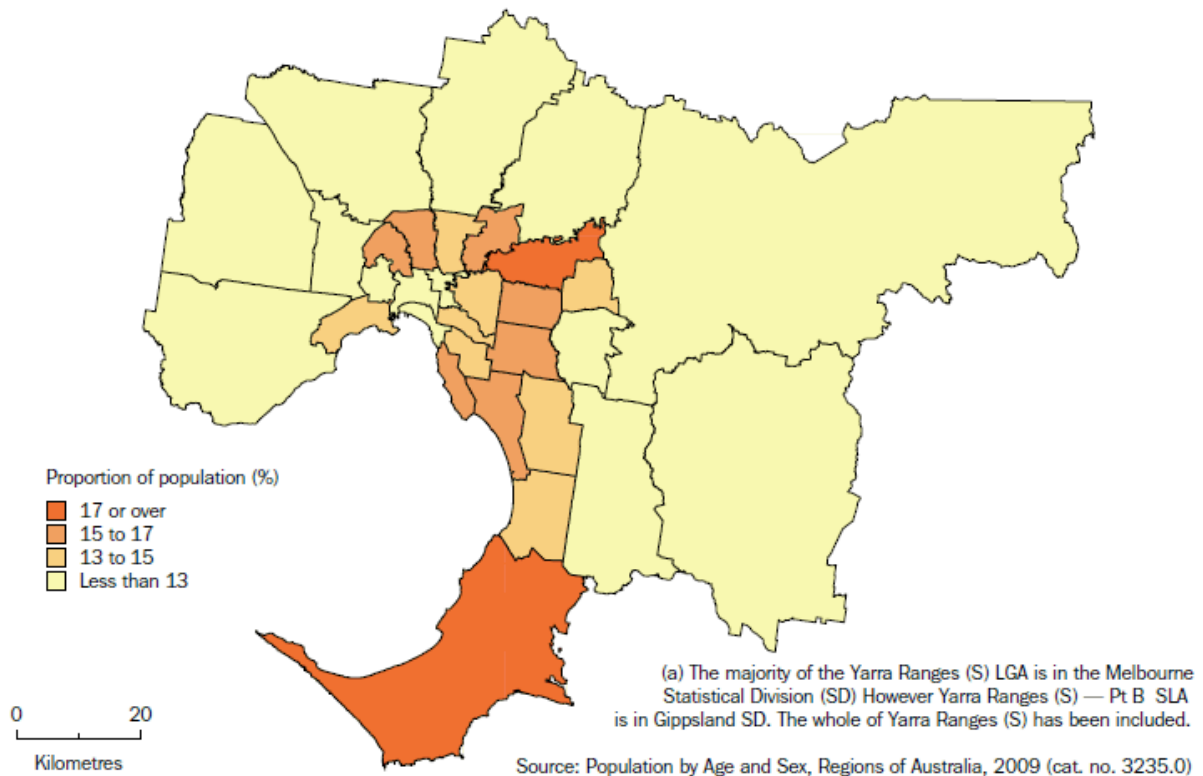
Local Government Areas



Source: Population by Age and Sex, Regions of Australia, 2009 (cat. no. 3235.0)

Proportion of Population Aged 65 Years and Over, Melbourne (a), 2009

Local Government Areas

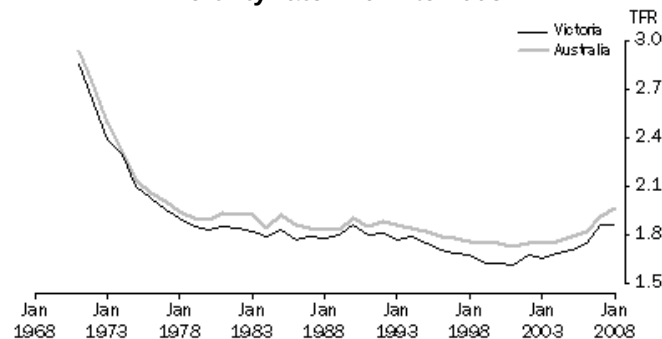


Fertility Rates

The total fertility rate (TFR) is the sum of age-specific fertility rates (live births at each age of mother per female population of that age), divided by 1,000. It represents the number of children a female would bear during her lifetime if she experienced current age-specific fertility rates at each age of her reproductive life.

Since 1971 there has been an overall decrease in fertility rates for both Australia and Victoria. Fertility rates for Victoria have been slightly lower than the national rate for the entire period (1971 to 2008). From 1980 to 2002, the Victorian rate has shown volatility (from 1.610 in 2001 to 1.863 in 1990) and from 2003 it has started to increase, reaching 1.861 in 2008.

Fertility rate - 1971 to 2008



Source: Birth Australia (cat. no. 3301.0).

Life Expectancy

Life expectancy has an impact on the age profile of a community and the following graph shows the pattern of life expectancy at birth for males and females in Victoria from 1988 to 2008. Over the period, life expectancy at birth for males increased by 6.0 years, from 73.6 to 79.6 and female life expectancy increased by 4.0 years

from 79.9 to 83.9. In 1988, the difference between male and female life expectancy was 6.3 years, however, the difference has narrowed over the last two decades to 4.3 years in 2008.



[Previous Page](#)

[Next Page](#)

State Comparison

[Contents >> State Comparison](#)



STATE COMPARISON

This section contains the following subsection :

- Summary of statistical indicators

[Previous Page](#)

[Next Page](#)

Summary of statistical indicators

[Contents >> State Comparison >> Summary of statistical indicators](#)

SUMMARY OF STATISTICAL INDICATORS

This chapter summarises the change in key Victorian statistical indicators and compares them with the same statistical indicators for other states and Australia.

View underlying table as an Excel spreadsheet: State comparison from the [Downloads Page](#).

[Previous Page](#)

[Next Page](#)

Population



POPULATION

This section contains the following subsection :

Estimated resident population

Australian historical population statistics

[Previous Page](#)

[Next Page](#)

Estimated resident population

[Contents >> Population >> Estimated resident population](#)

ESTIMATED RESIDENT POPULATION

Victoria's estimated resident population (ERP) at the end of any given period is the estimated population at the beginning of the period plus the sum of three components: natural increase, net overseas migration and net interstate migration.

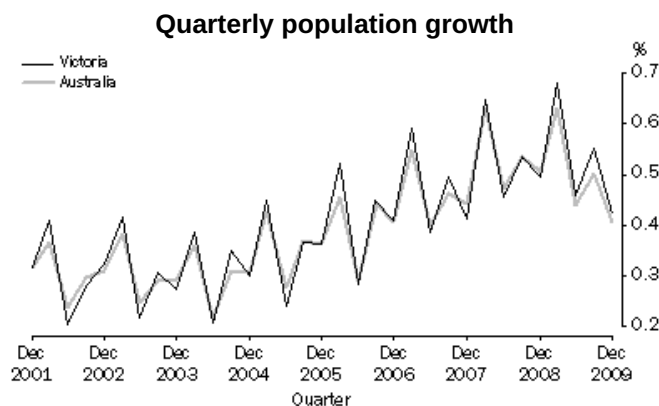
At the end of December quarter 2009, Victoria's ERP was 5,496,400 people, an increase of 23,100 (0.4%) since the end of September quarter 2009. Over the same period, Australia's ERP grew by 89,800 (0.4%).

Over the 12 months since the end of December quarter 2008, Victoria's ERP increased by 114,600 (2.1%).

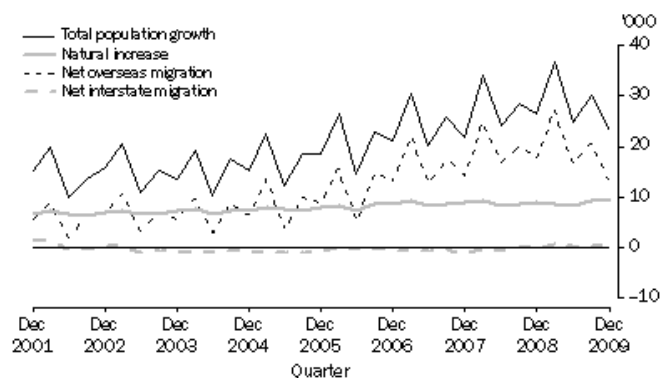
The largest component of Victoria's population growth in December quarter 2009 was net overseas migration (a gain of 13,100 people). Natural increase (births minus deaths) accounted for a further increase of 9,300 people.

Net interstate migration has historically meant loss of population from Victoria to other state and territories. However, following eleven consecutive quarters of loss, net interstate migration made a positive contribution to the state's population during the latest four quarters. Among these four quarters the largest contribution of net interstate migration (700 people) was in December quarter 2009.

View underlying table as an Excel spreadsheet: [Download Estimated resident population and Components of population change, Victoria from the Downloads Page.](#)



Components of population growth, Victoria



A spreadsheet containing estimates of the resident population of Victoria by single year of age and sex at 30 June 2009 can be found in **Population by Age and Sex, Australian States and Territories** (cat. no. 3201.0) on the Downloads page (Table 2). Also accessible via the Summary page of 3201.0 is the ABS **animated population pyramid**, which shows the change in the age and sex distribution of the population of Australia and each states and territory over time.

Summary commentary on population growth and distribution in Victoria and its regions can be found in **Regional Population Growth, Australia** (cat. no. 3218.0). This product contains estimates as at 30 June 2009 of the resident population at a sub-state level.

Further detail is also available in **Population by Age and Sex, Regions of Australia** (cat. no. 3235.0).

A **feature article** explaining how the ABS derives ERP, and the role of the Victorian regional office in producing these estimates, was published in the March quarter 2009 issue of **State and Regional Indicators, Victoria**.

[Previous Page](#)

[Next Page](#)

Australian historical population statistics

[Contents >> Population >> Australian historical population statistics](#)

AUSTRALIAN HISTORICAL POPULATION STATISTICS

A wide range of demographic data is available in spreadsheet format (Microsoft Excel) in **Australian Historical Population Statistics** (cat. no. 3105.0.65.001). The product is updated periodically, and more up-to-date information may be available from the source products stated at the bottom of each spreadsheet.

The following topics are covered by the spreadsheets in 3105.0.65.001:

- Population size and growth
- Indigenous population
- Population distribution
- Population age-sex structure
- Births
- Deaths
- Life tables
- Migration
- Country of birth
- Overseas arrivals and departures
- Marriages
- Divorces
- Marital status

Work and Income

[Contents >> Work and Income](#)



WORK AND INCOME

This section contains the following subsection :

- Revisions to population benchmarks
- Labour Force Survey standard products and data item guide
- Statistical significance of movements and other comparisons
- Civilian labour force by Region
- Employed persons by Industry
- Employed persons by Occupation
- Part-time workers
- Duration of unemployment
- Small area unemployment rate estimates
- Average weekly earnings

Revisions to population benchmarks

[Contents >> Work and Income >> Revisions to population benchmarks](#)

REVISIONS TO POPULATION BENCHMARKS

The ABS will be revising the population benchmarks underpinning the Labour Force Survey, due to revisions made to Net Overseas Migration estimates published in [September 2008](#) and [September 2009](#) issues of Australian Demographic Statistics (cat. no. 3101.0).

The revisions will be applied in the July 2010 issue of [Labour Force, Australia](#) (cat. no. 6202.0), to be released on 12 August 2010 and will affect the Work and Income chapter of the September 2010 issue of **State and Regional Indicators, Victoria** (cat. no. 1367.2).

Labour Force Survey standard products and data item guide

[Contents >> Work and Income >> Labour Force Survey standard products and data item guide](#)

LABOUR FORCE SURVEY STANDARD PRODUCTS AND DATA ITEM GUIDE

In December 2009, the ABS released [Labour Force Survey Standard Products and Data Item Guide](#) (cat.

no. 6103.0). This product itemises and cross references all data contained within the LFS standard products (including geographic data items), with an explanation of each data item, including relevant formats, and product location.

The LFS standard products are:

- **Labour Force, Australia** (cat. no. 6202.0)
- **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001)
- **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003)
- **Labour Force, Australia: Labour Force Status and Other Characteristics of Families** (cat. no. 6224.0.55.001)

[Previous Page](#)

[Next Page](#)

Statistical significance of movements and other comparisons

[Contents >> Work and Income >> Statistical significance of movements and other comparisons](#)

STATISTICAL SIGNIFICANCE OF MOVEMENTS AND OTHER COMPARISONS

As the estimates are based on a sample survey, published estimates and the movements derived from them are subject to sampling variability. This chapter includes commentary on movements in estimates between different time periods, as well as other comparisons between categories or geographic regions. Testing of statistical significance has not been undertaken, therefore some of the commentary may refer to movements or comparisons which are not statistically significant. Standard errors for estimates in the Labour Force Survey can be calculated by using the spreadsheet contained in **Labour Force Survey Standard Errors, Data Cube** (cat. no. 6298.0.55.001).

[Previous Page](#)

[Next Page](#)

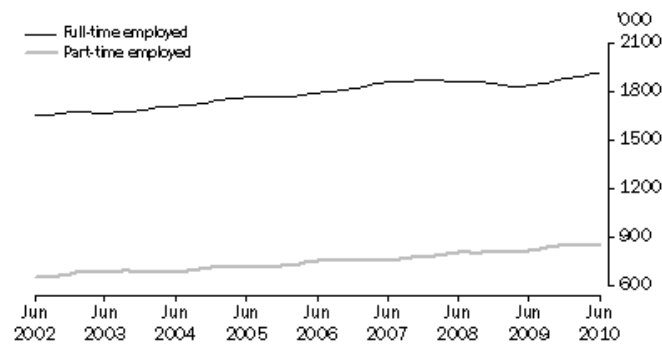
Civilian labour force by Region

[Contents >> Work and Income >> Civilian labour force by Region](#)

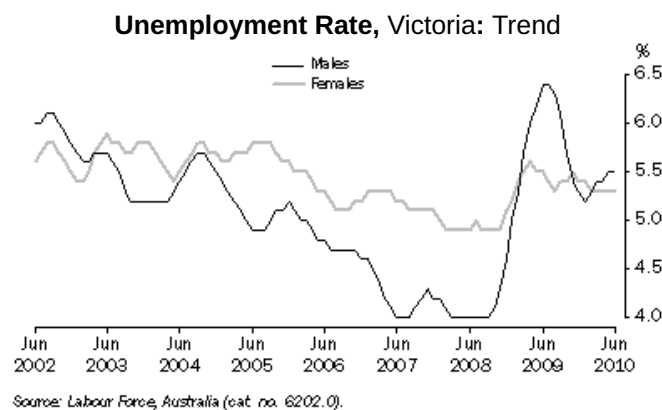
CIVILIAN LABOUR FORCE BY REGION

Based on trend estimates, total employment in Victoria rose by 110,100 persons (4.1%) between June 2009 and June 2010. The number of people employed full-time and part-time increased by 74,900 (4.1%) and by 35,200 (4.3%) respectively, over the same period. In June 2010, males accounted for 64.9% of full-time employed persons and 54.4% of total employed persons, while females accounted for 69.1% of part-time employed persons.

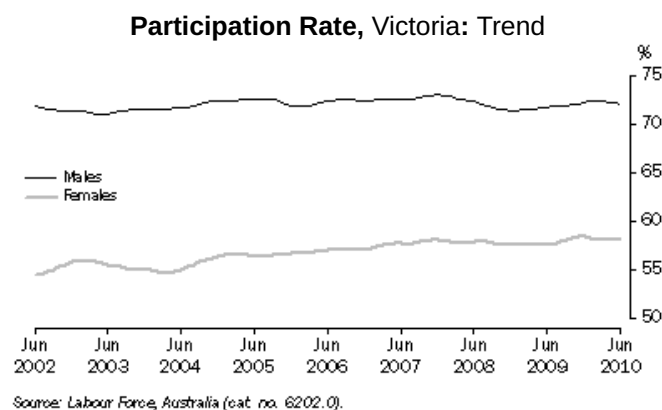
Employed Persons, Victoria: Trend



The trend estimate of the total number of unemployed persons in Victoria for June 2010 was 158,100 persons, a decrease of 10,400 persons from June 2009. The result of these changes was an unemployment rate of 5.4%, a decrease of 0.6 percentage points from June 2009. The male unemployment rate (5.5%) was higher than the female unemployment rate (5.3%) in June 2010.



The trend estimate of the participation rate for Victoria in June 2010 was 65.1% which was 0.5 percentage points higher than the rate recorded in June 2009. The female participation rate is historically lower than the male participation rate and in June 2010 the female and male participation rates were 58.3% and 72.2%, respectively. Between June 2009 and June 2010 the female participation rate increased by 0.7 percentage points while the male participation rate increased by 0.3 percentage points.



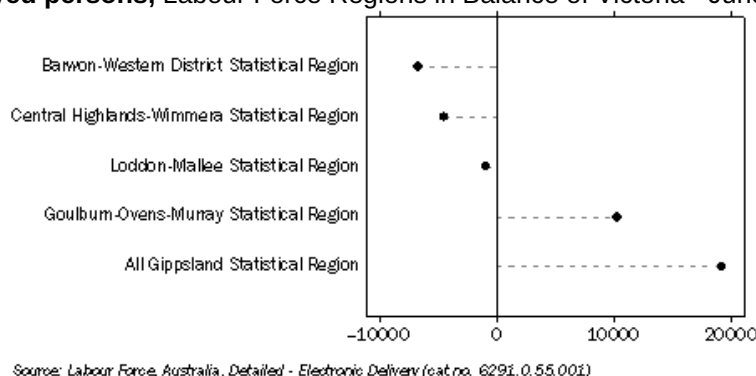
View underlying data as an Excel spreadsheet: [Download Table 05. Labour force status by Sex - Victoria - Trend, seasonally adjusted and original from the Downloads Page.](#)

Based on original estimates, in the Melbourne Major Statistical Region (MSR), there was an increase in employment (97,700) and a decrease in unemployment (16,800), resulting in the labour force growing by 81,000 people (3.8%) between June 2009 and June 2010. The labour force also grew in the Balance of Victoria MSR, with an increase in both employment (17,400) and unemployment (4,600). In the Melbourne MSR, both full-time and part-time employment increased - by 3.4% and 8.5% respectively, while in the Balance of Victoria MSR, full-time employment increased by 6.3% and part-time employment decreased by 4.0%. The rest of the chapter deals with original series estimates unless otherwise stated.

The labour force participation rate increased from 65.7% to 66.3% in the Melbourne MSR and from 61.0% to 61.4% in the Balance of Victoria MSR.

The proportion of employed people who worked full-time decreased from 70.2% to 69.2% in the Melbourne MSR and increased from 64.3% to 66.6% in the Balance of Victoria MSR.

Change in employed persons, Labour Force Regions in Balance of Victoria - June 2009 to June 2010



Within the Balance of Victoria MSR, the All Gippsland Statistical Region (SR) recorded the largest increase in employment (19,200), followed by the Goulburn-Ovens-Murray SR (10,300), while falls in employment were recorded in the Barwon-Western District SR (-6,700), the Central Highlands-Wimmera SR (-4,400) and the Loddon-Mallee SR (-900).

View underlying data as an Excel spreadsheet: [Download Civilian labour force, By Statistical Region from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

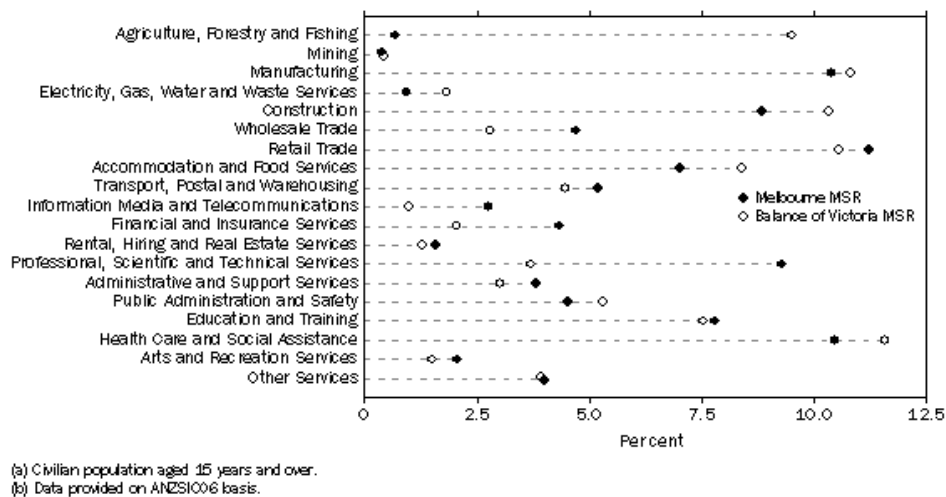
Employed persons by Industry

[Contents >> Work and Income >> Employed persons by Industry](#)

EMPLOYED PERSONS BY INDUSTRY

In May quarter 2010, the largest proportion of people employed in the Melbourne MSR were in Retail Trade (11.2%), followed by Health Care and Social Assistance (10.5%) and Manufacturing (10.4%). In the Balance of Victoria MSR, the largest proportion of people were employed in Health Care and Social Assistance (11.6%), followed by Manufacturing (10.8%) and Retail Trade (10.6%).

Employed persons(a), By Industry(b) and Major Statistical Region - May quarter 2010



In Victoria, Construction (88.6%) and Electricity, Gas, Water and Waste Services (81.3%) recorded the highest proportions of total males employed. Industries with the highest proportions of total females employed were Health Care and Social Assistance (79.6%) and Education and Training (70.6%).

In terms of full-time employment, Construction accounted for the highest proportion of males employed in Victoria (94.3%), and Health Care and Social Assistance accounted for the highest proportion of full-time females employed (71.9%).

The industry with the largest proportion of male part-time workers was Transport, Postal and Warehousing (70.9%), while Health Care and Social Assistance employed the largest proportion of part-time females (88.8%).

View underlying table as an Excel spreadsheet: [Download Employed persons, By Industry and Major Statistical Region - May quarter 2010 from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Employed persons by Occupation

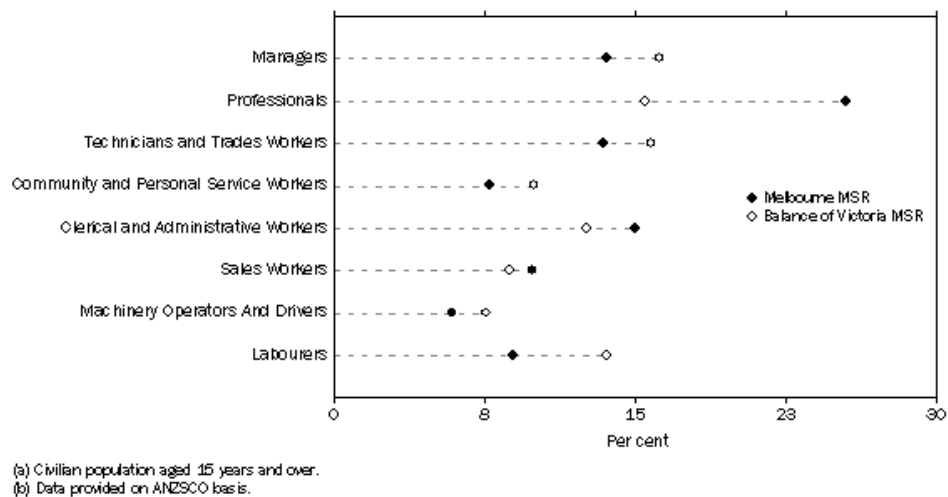
[Contents](#) >> [Work and Income](#) >> [Employed persons by Occupation](#)

EMPLOYED PERSONS BY OCCUPATION

In May quarter 2010, in the Melbourne MSR, more than a quarter of people were employed as Professionals (25.5%), with Clerical and Administrative Workers (15.0%), Managers (13.6%) and Technicians and Trades Workers (13.4%) being the next largest groups. In the Balance of Victoria MSR, the highest proportion of people were employed as Managers (16.2%) followed by Technicians and Trades Workers (15.8%) and Professionals (15.5%).

Full-time workers in Victoria worked mainly as Professionals (25.1%), Managers (18.0%) and Technicians and Trades Workers (17.5%), while part-time workers were mainly Professionals (18.5%), Sales Workers (18.0%) and Clerical and Administrative Workers (16.4%).

Employed persons(a), By Occupation(b) and Major Statistical Region - May quarter 2010



View underlying table as an Excel spreadsheet: [Download Employed persons, By Occupation and Major Statistical Region - May quarter 2010 from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Part-time workers

[Contents >> Work and Income >> Part-time workers](#)

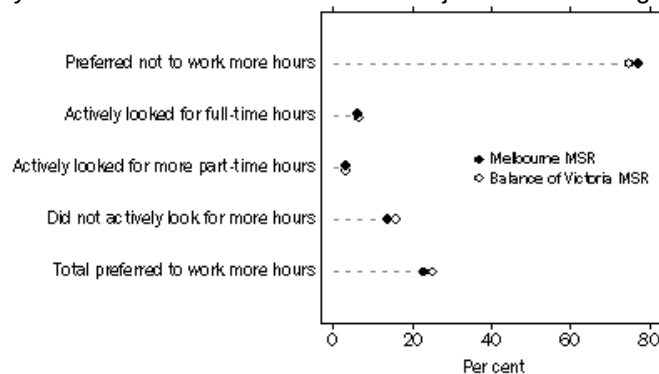
PART-TIME WORKERS

In May quarter 2010, there were 642,000 part-time workers in the Melbourne MSR - an increase of 55,200 (9.4%) since May quarter 2009.

The majority of part-time workers (77.1%) preferred not to work additional hours, and this was a more common preference amongst females (81.2%) than males (68.6%).

In the Balance of Victoria MSR, the total number of part-time workers in May quarter 2010 was 214,200, a decrease of 21,500 (9.1%) since May quarter 2009. The majority of these part-time workers (74.9%) preferred not to work more hours.

Part-time workers, By Preference for more hours and Major Statistical Region - May quarter 2010



View underlying table as an Excel spreadsheet: [Download Part time workers, By Preference for more hours, Sex and Major Statistical Region from the Downloads Page.](#)

Duration of unemployment

Contents >> Work and Income >> Duration of unemployment

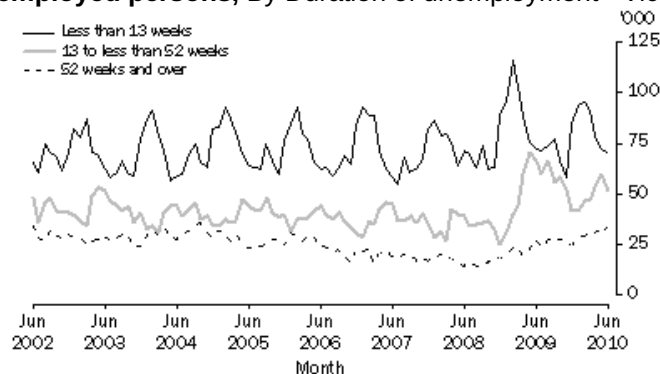
DURATION OF UNEMPLOYMENT

Between June 2009 and June 2010, the number of people classified as short-term unemployed (less than 13 weeks) decreased by 4,200 people (7.6%) in the Melbourne MSR and increased by 1,400 people (8.2%) in the Balance of Victoria MSR.

Over the same period, the number of people in the Melbourne MSR classified as medium-term unemployed (13 to less than 52 weeks) decreased by 16,800 people (32.6%), while the number of people increased by 1,400 (9.4%) in the Balance of Victoria MSR.

The number of people classified as long-term unemployed (52 weeks or more) increased by 4,200 people (22.6%) in the Melbourne MSR and by 1,700 people (18.9%) in the Balance of Victoria MSR.

Unemployed persons, By Duration of unemployment - Victoria



View underlying table as an Excel spreadsheet: [Download Unemployed persons, By Duration of unemployment, Sex and Major Statistical Region from the Downloads Page.](#)

Small area unemployment rate estimates

Contents >> Work and Income >> Small area unemployment rate estimates

SMALL AREA UNEMPLOYMENT RATE ESTIMATES

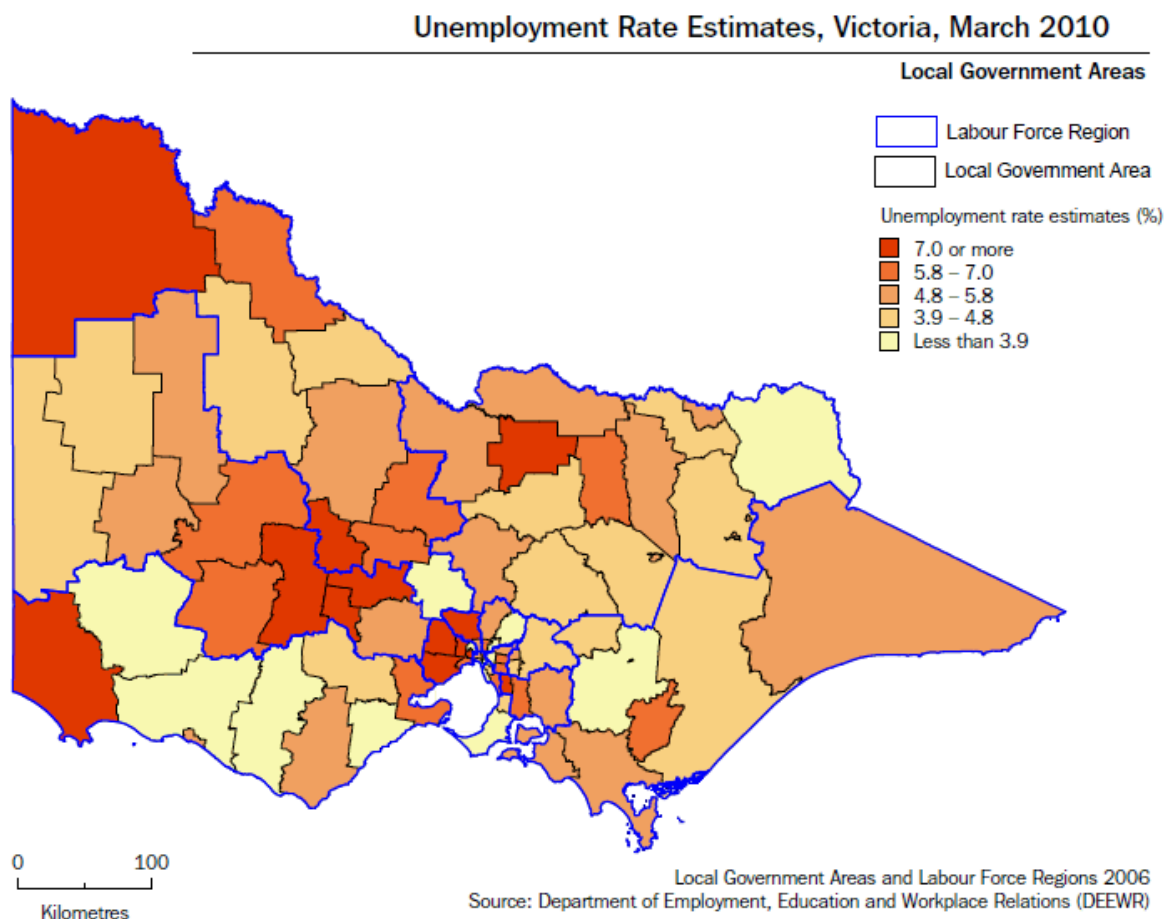
The Australian Government Department of Education, Employment and Workplace Relations (DEEWR) produce unemployment rate estimates at Statistical Local Area (SLA) level, using information derived from the ABS Labour Force Survey (LFS), supplemented by small area data from the ABS Census of Population and Housing and Centrelink.

DEEWR has made the transition to the geographic classification and population benchmarks now used in the LFS (based on the 2006 Census of Population and Housing) from those used previously (based on the 2001 Census). Unemployment estimates for SLAs and aggregates thereof for periods prior to March quarter 2008 are based on 2001 Census-based population benchmarks. For most areas, there has been no impact from the

change in geographic classification. Further details can be found in paragraphs 2-5 of the [Explanatory Notes](#).

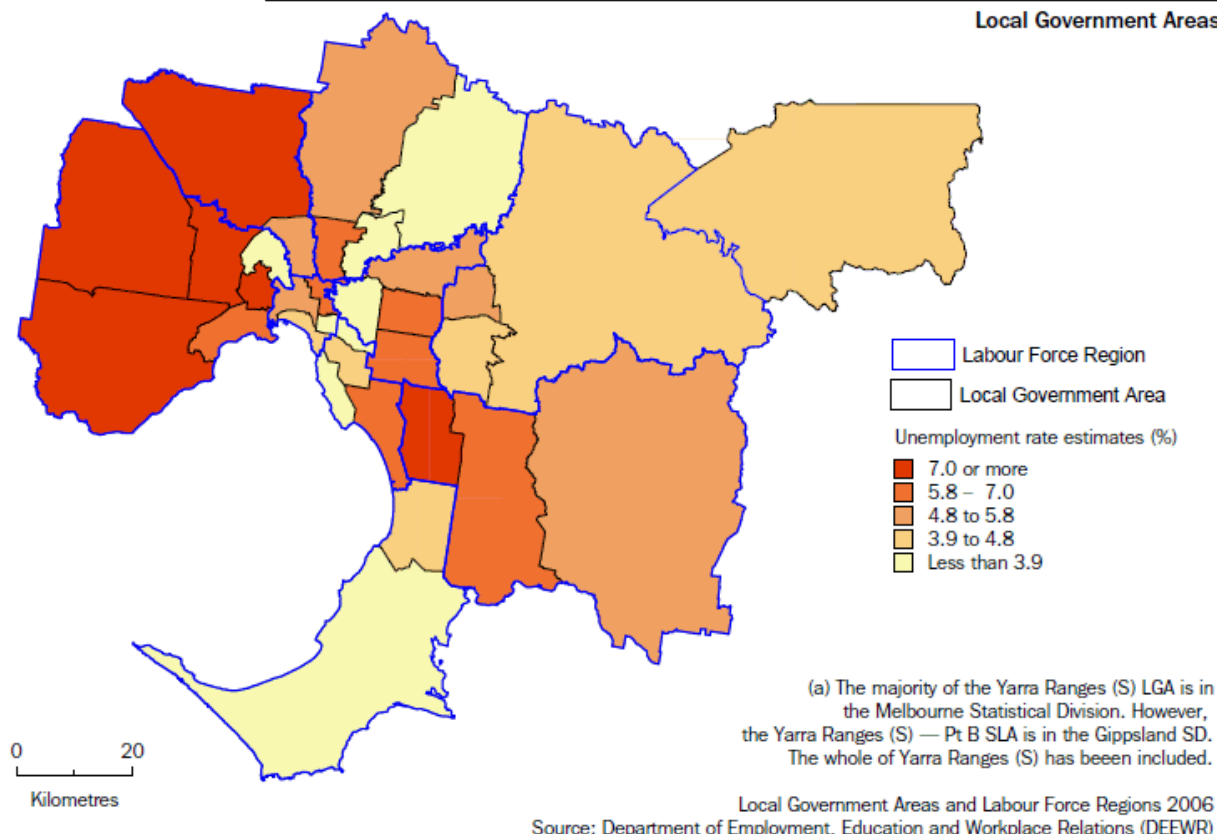
The series presented in the commentary below and in the underlying table is the DEEWR 'smoothed series'. The quarterly estimates have been smoothed using a four-quarter average ending in the reference quarter. Therefore, the reference period refers to an average over the year ended the last month of the reference quarter (for example, June quarter 2009 refers to the average of the four quarters from September quarter 2008 to June quarter 2009, or the average over the year ended June 2009).

In March quarter 2010, the highest unemployment rates were recorded in the LGAs of Greater Dandenong (10.8%), Central Goldfields (9.6%) and Hume (9.3%), while the lowest unemployment rates were recorded in Nillumbik (1.8%), Macedon Ranges (2.8%) and South Gippsland (2.9%). In March quarter 2010, 46.3% of Victorian LGAs recorded an unemployment rate of less than or equal to 5.0%.



Unemployment Rate Estimates, Melbourne(a), March 2010

Local Government Areas



View underlying table as an Excel spreadsheet: [Download Estimates of unemployment rate, By Local Government Area: Smoothed series from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Average weekly earnings

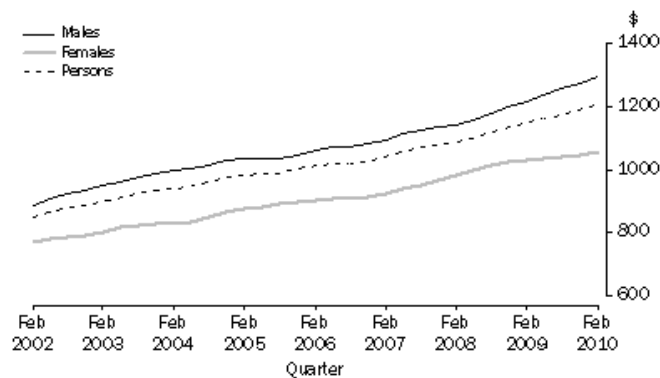
[Contents](#) >> [Work and Income](#) >> [Average weekly earnings](#)

AVERAGE WEEKLY EARNINGS

A sample redesign based on [Australian and New Zealand Standard Industrial Classification, 2006](#) (ANZSIC06) (cat. no. 1292.0) was introduced into the Average Weekly Earnings (AWE) survey in August 2009, along with some improvements to the survey frame. These changes have resulted in a shift in the level of the series. The difference in the level of the two series (ANZSIC06 and ANZSIC93) has been measured and backcast into the historical series to make a time series of estimates on an ANZSIC06 basis. Because of the extent of changes in level estimates, quarterly and annual percentage change movements for the new ANZSIC06 series are not identical to those under the old ANZSIC93 series. Differences at the state, sector and Australia levels are generally insignificant and within current released standard errors for each series.

In February quarter 2010, the trend estimate of average weekly full-time adult ordinary time earnings in Victoria was \$1,204.96, an increase of 4.8% from February quarter 2009. Over the same period, trend full-time adult ordinary time earnings increased by 6.1% for males and by 2.3% for females.

Average weekly full-time adult ordinary time earnings, By Sex - Victoria: Trend



View underlying table as an Excel spreadsheet: Download Average weekly earnings of employees, By Sex - Victoria: All series from the [Downloads Page](#).

[Previous Page](#)

[Next Page](#)

State Final Demand

[Contents >> State Final Demand](#)



STATE FINAL DEMAND

This section contains the following subsection :
State final demand

[Previous Page](#)

[Next Page](#)

State final demand

[Contents >> State Final Demand >> State final demand](#)

STATE FINAL DEMAND

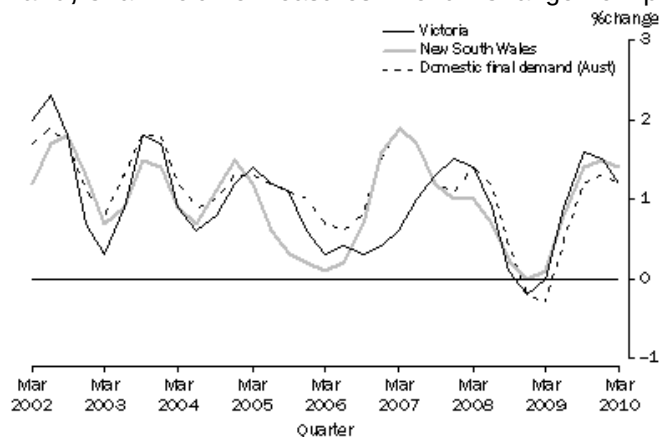
State final demand is the estimate obtained by summing government final consumption expenditure, household final consumption expenditure, private gross fixed capital formation and the gross fixed capital formation of public corporations and general government.

In March quarter 2010, the trend estimate for Victorian final demand, in volume terms, was \$75,585 million, an increase of 1.2% from December quarter 2009. This was the same as the trend growth for Australian domestic final demand (1.2%) and below New South Wales (1.4%) over the same period.

Household final consumption expenditure is the largest component of state final demand, and accounted for 55.3% of the trend volume estimate of state final demand in March quarter 2010. The trend volume estimate of household final consumption expenditure increased by 0.3% from the previous quarter. The other main contributors to trend state final demand in March quarter 2010 were private gross fixed capital formation (23.9%) and government final consumption expenditure (16.2%).

View underlying data as an Excel spreadsheet: Download State final demand, Victoria, Chain volume measures: Seasonally adjusted and trend and State final demand, Victoria, Original from the [Downloads Page](#).

State final demand, Chain volume measures: Trend - Change from previous quarter



[Previous Page](#)

[Next Page](#)

Price Indexes

[Contents >> Price Indexes](#)



PRICE INDEXES

This section contains the following subsection :

Consumer Price Index

House price indexes

[Previous Page](#)

[Next Page](#)

Consumer Price Index

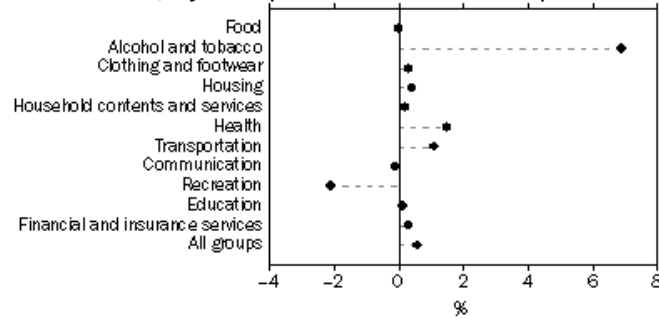
[Contents >> Price Indexes >> Consumer Price Index](#)

CONSUMER PRICE INDEX

Between March quarter 2010 and June quarter 2010, the All groups Consumer Price Index (CPI) for Melbourne increased by 0.6%. The groups that recorded the largest increases were: Alcohol and tobacco (6.9%), Health (1.5%) and Transportation (1.1%). The groups that recorded decreases were Recreation (-2.1%) and Communication (-0.1%).

Between June quarter 2009 and June quarter 2010, the All groups CPI for Melbourne rose by 3.1%. The All groups CPI weighted average of the eight capital cities also rose by 3.1% over the same period. The biggest annual increases for Melbourne were recorded in Alcohol and tobacco (9.1%), Education (8.0%), Housing (7.3%), Health (5.2%) and Transportation (2.7%). The group that recorded the largest decrease for the year was Clothing and footwear (-4.7%).

Change in Consumer Price Index, By Group, Melbourne - March quarter 2010 to June quarter 2010



View underlying table as an Excel spreadsheet: [Download Consumer price index, By Group, Melbourne and Weighted average of eight capital cities from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

House price indexes

[Contents](#) >> [Price Indexes](#) >> [House price indexes](#)

HOUSE PRICE INDEXES

The price index for established houses covers transactions in detached residential dwellings on their own block of land regardless of age (i.e. includes new houses sold as a house/land package as well as second-hand houses). Price changes therefore relate to changes in the total price of dwellings and land.

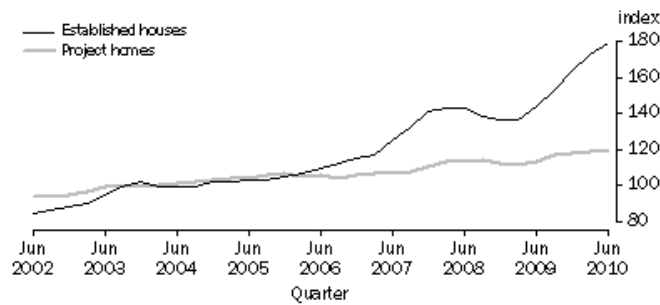
A detailed description of the concepts, sources and methods behind the established house price index can be found in [House Price Indexes: Concepts, Sources and Methods, Australia](#) (cat. no. 6464.0). This publication was re-released in December 2009, and covers the changes made in the stratification method and weights as a result of a review of the established house price index in 2007 and 2008, as well as more information on how the index is calculated and on price index concepts in general.

Project homes are dwellings available for construction on an existing block of land. Price changes relate only to the cost of constructing the dwelling (excluding land).

In June quarter 2010, the price index of project homes in Melbourne increased by 1.0% from the previous quarter. Based on preliminary estimates, the price index of established houses increased by 3.6% over the same period. Preliminary estimates of the weighted average of the eight capital cities showed an increase of 3.1% in established house prices and an increase of 0.7% in project home prices from the previous quarter.

From June quarter 2009 to June quarter 2010, established house prices in Melbourne increased by 24.3% and project home prices increased by 5.8%.

House price indexes, Melbourne



(a) Base of each index: four quarter average 2003-04 = 100.0.
 (b) Estimates for the two most recent quarters of the established house price index are preliminary.

View underlying table as an Excel spreadsheet: [Download House price indexes, Melbourne and Weighted average of eight capital cities from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Construction

[Contents >> Construction](#)



CONSTRUCTION

This section contains the following subsection :

- Building approvals
- Engineering construction activity

[Previous Page](#)

[Next Page](#)

Building approvals

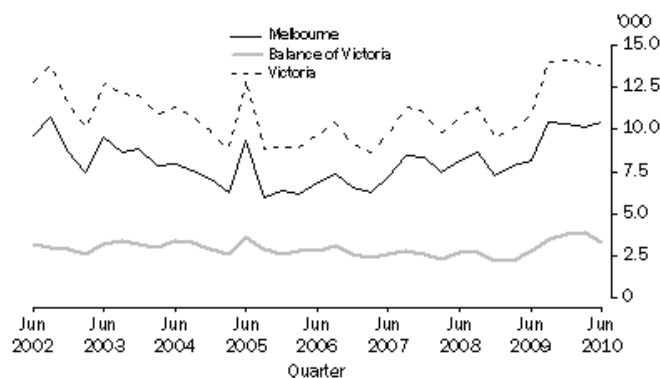
[Contents >> Construction >> Building approvals](#)

BUILDING APPROVALS

In June quarter 2010, there were 13,743 new dwelling units approved in Victoria, of which 75.8% were in the Melbourne MSR. There were 277 less dwelling unit approvals (-2.0%) in Victoria than in the previous quarter, but 2,837 (26.0%) more than in June quarter 2009. The number of dwelling units approved in the Melbourne MSR increased by 2.8% compared with the previous quarter and increased by 28.0% compared with June quarter 2009. In the Balance of Victoria MSR there was a decrease of 559 units (14.4%) from the previous quarter and an increase of 556 (20.0%) over the June quarter 2009.

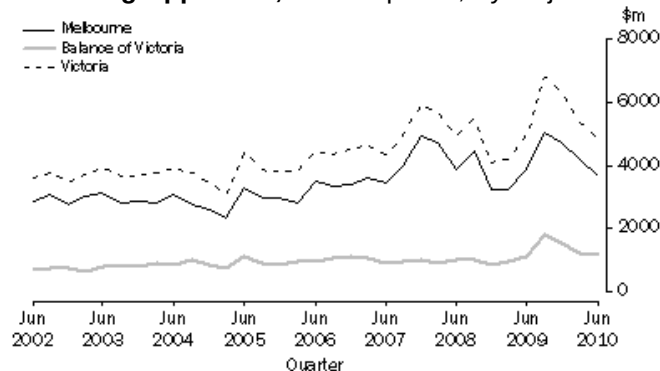
More than one third (34.6%) of dwelling unit approvals in the Melbourne MSR over the June quarter 2010 were in three LGAs - Wyndham (1,430), Whittlesea (765), Casey (713) and Melton (692). In the Balance of Victoria MSR, the LGAs with the highest number of dwelling units approved were Greater Geelong (567), Ballarat (266) and Greater Bendigo (250).

Dwelling Unit Approvals, By Major Statistical Region



At current prices, the total value of building approvals in Victoria in June quarter 2010 was \$4,855.0 million, a decrease of \$524.1 million (-9.7%) since March quarter 2010, and also a decrease of \$147.2 million (2.9%) compared with June quarter 2009.

Value of All Building Approvals, Current prices, By Major Statistical Region



View underlying table as an Excel spreadsheet: Download Building approvals, By Local Government Area from the [Downloads Page](#).

[Previous Page](#)

[Next Page](#)

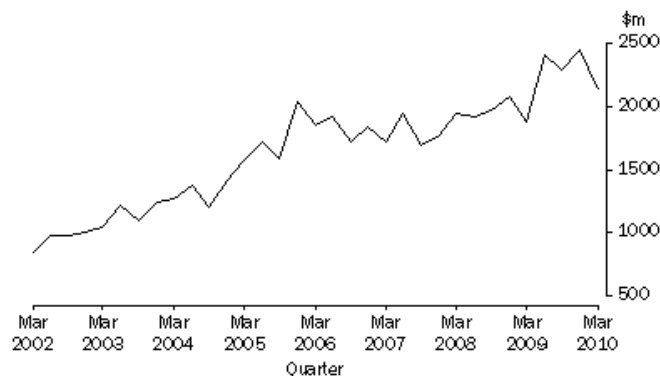
Engineering construction activity

[Contents](#) >> [Construction](#) >> [Engineering construction activity](#)

ENGINEERING CONSTRUCTION ACTIVITY

For Victoria, the total value (at current prices) of engineering construction activity, work done, during March quarter 2010 was \$2.1 billion, a decrease of 13.2% from December quarter 2009 and an increase of 13.4% over March quarter 2009. Work done for Roads highways and subdivisions made up 22.8% of the total value, while Water storage and supply, sewerage and drainage made up 21.9% and Electricity generation, transmission etc. and pipelines 15.9%.

Value of engineering construction work done, Current prices, Victoria



View underlying table as an Excel spreadsheet: Download Engineering construction activity, By Type - Victoria: Original from the [Downloads Page](#).

[Previous Page](#)

[Next Page](#)

Tourism

[Contents >> Tourism](#)



TOURISM

This section contains the following subsection :
Tourist accommodation

[Previous Page](#)

[Next Page](#)

Tourist accommodation

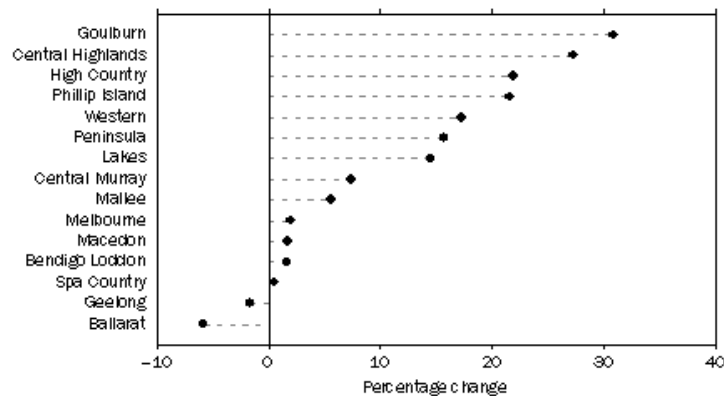
[Contents >> Tourism >> Tourist accommodation](#)

TOURIST ACCOMMODATION

In March quarter 2010, total accommodation takings for hotels, motels and serviced apartments in Victoria with 15 or more rooms were \$381.2 million, an increase of 3.7% from March quarter 2009. The Melbourne Tourism Region accounted for the majority of Victoria's accommodation takings (76.7%).

The highest percentage growth in accommodation takings between March quarter 2009 and March quarter 2010 was recorded in the Tourism Region of Goulburn (30.9%) followed by Central Highlands (27.3%) and High Country (21.9%). The two Tourism Regions Ballarat (-5.9%) and Geelong (-1.7%) experienced a decrease over the same period.

Change in takings from accommodation(a), By Tourism Region(b) - March quarter 2009 to March quarter 2010



(a) Hotels, motels and serviced apartments with 15 or more rooms.
 (b) 'Change in Takings' was not available for the following Tourism Regions: Wimmera, Murray East, Western Grampians, Gippsland, Melbourne East and Upper Yarra.

View underlying data as an Excel spreadsheet: [Download Tourist accommodation, By Tourism Region - March quarter 2010 from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Agriculture

[Contents >> Agriculture](#)



AGRICULTURE

This section contains the following subsection :
 Livestock slaughtering and meat production
 Other Agricultural Production

[Previous Page](#)

[Next Page](#)

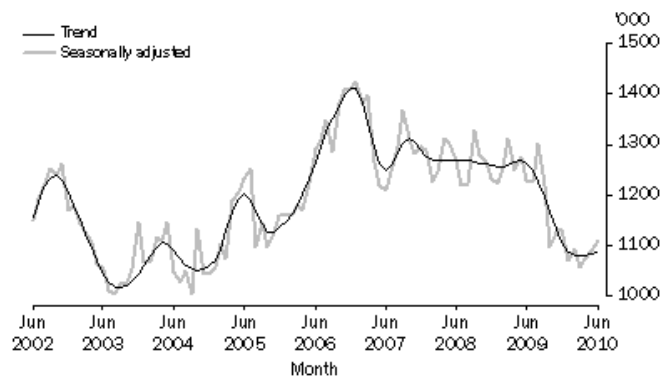
Livestock slaughtering and meat production

[Contents >> Agriculture >> Livestock slaughtering and meat production](#)

LIVESTOCK SLAUGHTERING AND MEAT PRODUCTION

The trend estimate for the number of livestock slaughtered decreased by 173,800 (13.8%) between June 2009 and June 2010. Slaughtering of Sheep, Calves, Lambs and Cattle decreased by 42.7%, 10.4%, 8.1% and 5.0% respectively, while slaughtering of Pigs increased by 30.6% over the period.

Total livestock slaughtering, Victoria



Between June 2009 and June 2010, the trend estimate for total meat production for Victoria decreased by 887.7 tonnes (1.6%). The production of Mutton, Veal and Lamb decreased by 34.3%, 6.2% and 1.3% respectively, while increases were recorded for Pig meat (28.3%) and Beef (0.2%) over the same period.



View underlying table as an Excel spreadsheet: [Download Livestock slaughtering and meat production, Victoria: All series from the Download Page.](#)

[Previous Page](#)

[Next Page](#)

Other Agricultural Production

[Contents >> Agriculture >> Other Agricultural Production](#)

OTHER AGRICULTURAL PRODUCTION

Statistics for Other Agriculture Production are available from the [Downloads](#) page. The data items: wool receivals, live sheep exports, chicken slaughtered and chicken meat are sourced from the ABS and the data items: milk and milk products are from non-ABS sources.

[Download Other agricultural production, Victoria from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Trade

[Contents >> Trade](#)



TRADE

This section contains the following subsection :

- Confidentiality of merchandise trade statistics
- International merchandise trade - Export data commodity prices adjustment
- Balance of merchandise trade
- Trade by Commodity
- Major trading partners

[Previous Page](#)

[Next Page](#)

Confidentiality of merchandise trade statistics

[Contents >> Trade >> Confidentiality of merchandise trade statistics](#)

CONFIDENTIALITY OF MERCHANDISE TRADE STATISTICS

The release of statistics for certain merchandise trade commodities is restricted in order to prevent the identification of the activities of an individual business, where it is requested by the business. These restrictions do not affect the total value of exports and imports for Australia, but they can affect statistics at disaggregated levels, including by state.

Prior to September 2008, import commodities with confidentiality restrictions 'No commodity details' or 'No value details' contributed to the relevant state and country totals, so that these totals showed the accurate level of trade. To ensure the confidentiality of data, this treatment changed in September 2008. Import commodities with these confidentiality restrictions are now excluded from all state-level data. Therefore, data on imports for Victoria may understate the actual amount of trade in Victoria, including the amount of trade with the state's major trading partners.

From December 2008, some additional commodities have had a restriction of 'No commodity details' applied, and care should be taken when interpreting the data on Machinery and transport equipment in the commodity table in the chapter.

[Previous Page](#)

[Next Page](#)

International merchandise trade - Export data commodity prices adjustment

[Contents >> Trade >> International merchandise trade - Export data commodity prices adjustment](#)

INTERNATIONAL MERCHANDISE TRADE - EXPORT DATA COMMODITY PRICES ADJUSTMENT

International merchandise trade exports data are based on information provided by exporters to the Australian Customs and Border Protection Service (Customs and Border Protection). At the time of initial reporting to Customs and Border Protection the final prices may not be known for some commodities. New contract prices that have been recently negotiated, or are still being negotiated, for commodities like iron ore and coal may not be fully reflected in the Customs and Border Protection source data. Final prices are updated progressively in

recorded trade data as exporters revise the information provided to Customs and Border Protection.

It is not yet known how the recent move from annual to quarterly contracts for some exporters will impact on the reporting of information. For more information please refer to [International Trade in Goods and Services, Australia, Jun 2010](#) (cat. no. 5368.0).

[Previous Page](#)

[Next Page](#)

Balance of merchandise trade

[Contents](#) >> [Trade](#) >> [Balance of merchandise trade](#)

BALANCE OF MERCHANDISE TRADE

In June 2010, the balance of international merchandise trade (i.e. the value of exports less the value of imports) for Victoria was a deficit of \$3,036m. The value of the state's merchandise exports were \$1,639m, while merchandise imports totalled \$4,675m. Compared with June 2009, Victoria's trade deficit in June 2010 was \$621m (25.7%) higher, with a rise in the value of exports (up \$217m, or 15.3%) being offset by a larger rise in the value of imports (up \$838m, or 21.8%). Victoria recorded an average monthly trade deficit of \$2,891m for the 12 months ending June 2010.

At the national level, the value of imports was 14.1% higher in June 2010 compared with June 2009, while the value of exports (including re-exports) was 36.5% higher over the same period.



In 2009-10, Victoria's trade deficit was \$34,693m, a decrease of \$1,389m (3.8%) over the previous financial year. The state's exports and imports decreased by \$1,937m (9.5%) and \$3,326m (5.9%) respectively.

View underlying table as an Excel spreadsheet: [Download Balance of international merchandise trade from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Trade by Commodity

[Contents](#) >> [Trade](#) >> [Trade by Commodity](#)

TRADE BY COMMODITY

More than a quarter (28.4%) of Victoria's merchandise exports in 2009-10 were Food and live animals, followed by Machinery and transport equipment (19.5%). Compared with 2008-09, only Crude materials, inedible, except fuels rose by \$312m while decreases were observed for all other commodity groups. The largest decreases in exports were recorded in Food and live animals (-\$641m) and Manufactured goods classified chiefly by material (-\$579m).

Food and live animals accounted for 28.8% of Victoria's exports in June quarter 2010, while Machinery and transport equipment contributed 19.8% of the total.

Imports of Machinery and transport equipment comprised 39.7% of total Victorian imports in 2009-10, more than twice the size of the next largest category (Miscellaneous manufactured articles, 16.6%). Between 2009-10 and 2008-09, imports of all commodities decreased, the largest decreases were in Miscellaneous manufactured articles (\$1,093m) and Machinery and transport equipment (-\$556m).

In June quarter 2010, Machinery and transport equipment made up 40.9% of the state's imports, with a further 15.2% being Miscellaneous manufactured articles.

View underlying table as an Excel spreadsheet: [Download International merchandise trade, By Commodity - Victoria from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Major trading partners

[Contents >> Trade >> Major trading partners](#)

MAJOR TRADING PARTNERS

Based on the value of trade, Victoria's biggest trading partner in 2009-10 was China, with combined exports and imports of \$12,858m. The next biggest trading partners were the United States of America, Japan, New Zealand and Germany. With the exception of New Zealand (a trade deficit of \$356m), Victoria's largest trade deficits in 2009-10 were recorded with its biggest trading partners - China (\$8,096m), the United States of America (\$4,508m), Japan (\$3,546m) and Germany (\$3,362m). Over the same period, trade surpluses were recorded with three of the state's 30 major trading partners, Saudi Arabia (\$1,030m), United Arab Emirates (\$395m) and Hong Kong (\$164m).

The top five destinations of Victoria's exports in June quarter 2010 were China, New Zealand, the United States of America, Japan and Saudi Arabia. Combined, 46.4% of the state's exports in the quarter went to these countries. Nearly one-fifth (18.5%) of imports to Victoria came from China, with the United States of America (11.7%) and Japan (9.5%) being the next two largest sources.

View underlying table as an Excel spreadsheet: [Download International merchandise trade, By Major trading partner - Victoria from the Downloads Page.](#)

[Previous Page](#)

[Next Page](#)

Environment

[Contents >> Environment](#)



ENVIRONMENT

This section contains the following subsection :

Air quality
Water resources

[Previous Page](#)

[Next Page](#)

Air quality

[Contents >> Environment >> Air quality](#)

AIR QUALITY

The Air Quality Index compiled by the Victorian Environment Protection Authority measures the concentration of various pollutants relative to the concentration levels at which they may cause harm. The lower the index is, the better the quality of our air. The index is available for four areas in the Port Phillip Region (East, West, City and Geelong) and the Latrobe Valley.

The Visibility Pollutant Index is an indicator of visibility reduction, and is measured by the concentration of airborne particles relative to Victorian standards. Incidents of poor visibility are generally higher during the cooler months of autumn and winter (from May to September), whereas ozone levels are generally higher during the warmer months of spring and summer (from November to February).

View underlying table as an Excel spreadsheet: Download Air quality, By Region from the [Downloads Page](#).

[Previous Page](#)

[Next Page](#)

Water resources

[Contents >> Environment >> Water resources](#)

WATER RESOURCES

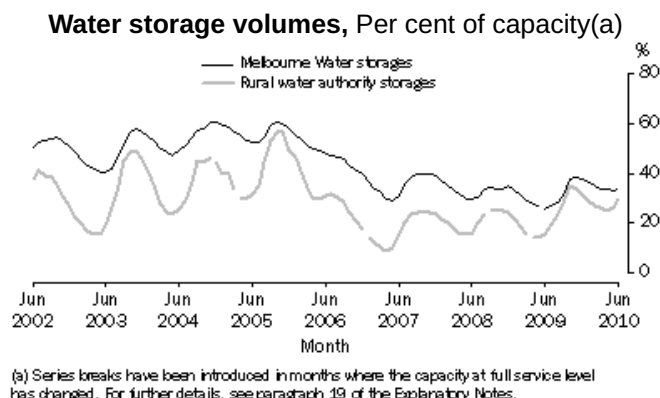
At the end of June 2010, Victoria's water storages were at 29.5% of their capacity at full service level of 14,020 GL. This was 3.1 percentage points higher than the level in May 2010, and 13.5 percentage points higher than in June 2009.

Melbourne's water storage level at the end of June 2010 was 33.8% of capacity. This was one percentage point higher than in May 2010 and 7.8 percentage points higher than in June 2009. Rural water storages held 29.5% of their capacity at the end of June 2010, 3.3 percentage points higher than in May 2010, and 13.9 percentage points higher than the level in June 2009.

Between June 2009 and June 2010, the volume of water held in rural water storages increased by 88.9%. Lake Eildon in the Goulburn basin captured 37.4% of this increase, with a further 40.1% of the increase being in Murray basin storages. Just under three-quarters (73.9%) of the storage capacity at full service level of Victoria's rural water storages (9,396 GL) is represented by Lake Eildon (3,390 GL) and the state's share of Murray basin storages (3,557 GL). From June 2009 to June 2010, the volume of water in Lake Eildon increased from 12.8% of capacity to 27.2%.

The total capacity of the state's storages reduced by 365 GL in April 2009 following the decommissioning of

Lake Mokoan, while 38 GL was added to full capacity in June 2009 when the Tarago Reservoir was added to the Melbourne supply system. A summary of changes to total storage capacity since December 2004 can be found in paragraph 14 of the [Explanatory Notes](#).



View underlying table as an Excel spreadsheet: [Download Water storage levels, By River Basin from the Downloads Page](#).

[Previous Page](#)

Water and energy efficiency elements of households in older and newer dwellings (Feature Article)

FEATURE ARTICLE: WATER AND ENERGY EFFICIENCY ELEMENTS OF HOUSEHOLDS IN OLDER AND NEWER DWELLINGS

INTRODUCTION

In recent years, climate change challenges have received increasing government focus. One challenge receiving particular focus is that of improving the environmental sustainability of households. This feature article explores sources of water and energy, insulation and energy use in residential dwellings and examines the differences and similarities between newer and older dwellings.

Internationally, sustainable development has been present in discourse for over two decades, with the 1987 United Nations report *Our Common Future* citing the importance of intergenerational equity for development (United Nations 1987). In 1998, the OECD named sustainable development a key priority and an overarching goal for its member countries (DEWHA 2008).

The 1992 Intergovernmental Agreement on the Environment between all levels of Australian government served to facilitate a cooperative national approach to the environment where economic and environmental considerations were to be integrated into decisions about development (DEWHA 2010a). Complementing the aim of sustainable development is the concern for the sustainability and livability of Australia's cities (Infrastructure Australia 2010).

Historically, Australian buildings have not been built with energy efficiency as a key concern (COAG 2009). However, since the early 2000s in Australia, there has been a focus on the environmental sustainability of new residential and commercial buildings. The National Framework for Energy Efficiency (NFEF), implemented in 2002 by the Ministerial Council on Energy, defines future directions for energy efficiency policy in Australia. In 2004, national minimum design standards for the energy efficiency of new residential buildings and renovations were set as part of the NFEF. In conjunction with the Australian Building Codes Board, a new five star energy efficiency standard for new buildings was introduced under NFEF in 2007 (Ministerial Council on Energy 2007).

In 2009 the Council of Australian Government (COAG) introduced the National Strategy for Energy Efficiency, which built on the NFEF to encourage and support innovation in energy efficiency technologies and approaches. Under the strategy, minimum energy efficiency standards will be nationally upgraded to six stars,

or equivalent, from 2011.

A building's star rating (out of 10) depends on the layout of the home, the construction of its roof, walls, windows and floor, the orientation of windows and shading to the sun's path and local breezes and how well these suit the local climate. A five star rating indicates good, but not outstanding, thermal performance (DEWHA 2010b). Certain states, such as NSW and Victoria, expanded on these requirements and stipulated further measures to meet their standards.

In 2005 the Victorian government was the first state to implement the five star standard for all new homes, which was extended in 2008 to include renovations and relocations of homes. At the time of the survey, to meet energy efficiency and water management standards, new Victorian residential buildings and renovations required a five star energy rating for the building fabric (as stipulated by the NFEF), water saving taps and fittings, and the installation of either a rainwater tank for toilet flushing or a solar hot water service. While insulation was not mandatory, it was recommended as the best way to improve a building's energy efficiency (Building Commission 2004).

CHARACTERISTICS FOR NEWER AND OLDER DWELLINGS

Across Australia, data from the Survey of Income and Housing showed that 8.9% of first home owners with a mortgage bought a new dwelling in 2007-08, down from 23% in 1995-96 (ABS 2009). The average value of a new dwelling in Victoria in 2007-08 was \$446,300 and \$333,900 for an established dwelling (ABS, Customised data from the Survey of Income and Housing, 2007-08, 2010). In 2008, around a third (31%) of all private sector building approvals in Australia were in Victoria, the highest of all the states (ABS 2010).

Of the 2.1 million households in Victoria in 2009, 2.0 million (96%) lived in older dwellings (more than two years old as at October 2009) and 80,300 (3.8%) lived in newer dwellings (two years old or less as at October 2009). Of the households in newer dwellings, 63,100 were in Melbourne Major Statistical Region and 17,200 were in the remainder of Victoria.

It must be noted that due to the small number of households in newer dwellings in relation to households in older dwellings, the actual numbers for these variables were higher for households in older dwellings. However, proportions have been used in the analysis in order to gain a greater understanding of the trends for households in newer dwellings as compared to households in older dwellings.

In Victoria, households that lived in newer and older dwellings showed similarities for some characteristics and differences for others. The proportion of households were similar regardless of whether they lived in a newer or older dwelling across all income brackets, whether or not the household had children, and for all household sizes, as seen in table 1.

Household Characteristics, Victoria - 2009

Household Characteristics	Dwelling age	
	Older dwellings(a) %	Newer dwellings(b) %
Income		
Less than \$25,000 per year	22.4	18.8
\$25,000 to less than \$50,000 per year	21.1	22.6
\$50,000 to less than \$70,000 per year	15.7	11.9
\$70,000 to less than \$110,000 per year	19.9	20.1
\$110,000 or more per year	16.3	18.7
Household size		
One person household	24.9	23.2
Two person household	32.6	34.5
Three to five person household	39.6	39.3
Whether children in the household		
Children 0-14 years	27.2	29.0
No Children 0-14 years	72.8	71.0

(a) Dwelling that household resided in was more than two years old at October 2009.

(b) Dwelling that household resided in was two years old or less at October 2009.

Source: Household Water, Energy Use and Conservation, Victoria, Oct 2009 (cat. no. 4602.2).

However, there were some differences for the proportions of households in older and newer dwellings in relation to dwelling type and tenure type, as seen in table 2.

For Victorian households, 78% lived in separate houses and the remaining 22% lived in semi-detached

dwellings, row or terrace houses, town houses, apartments, flats or units (hereafter known as semi-detached dwellings or apartments). This was similar for households in older dwellings (79% and 21% respectively) but for households in newer dwellings, 55% lived in separate houses and 45% lived in semi-detached dwellings or apartments.

There was a similar occurrence for tenure type where households in older dwellings followed the Victorian trend, but households in newer dwellings differed somewhat. 72% of households in older dwellings owned their dwelling outright or were paying it and 26% were renting (including rent free) whereas for households in newer dwellings, 58% owned the dwelling outright or were paying it off and 40% rented.

Household Characteristics, Victoria - 2009

Household Characteristics	Dwelling age	
	Older dwellings(a) %	Newer dwellings(b) %
Dwelling type		
Separate house	79.4	54.7
Flat, unit or apartment, semi-detached etc	20.5	45.3
Tenure type		
Owned outright	37.1	19.2
Being paid off	35.1	38.4
Rented (including rent free)	25.7	39.5

(a) Dwelling that household resided in was more than two years old at October 2009.

(b) Dwelling that household resided in was two years old or less at October 2009.

Source: Household Water, Energy Use and Conservation, Victoria, Oct 2009 (cat. no. 4602.2).

As households in newer dwellings were more likely than households in older dwellings to be renting or residing in semi-detached dwellings and apartments, this may have impacted the results when looking at water and energy sources and use by dwelling age. Overall, rented dwellings and semi-detached dwellings and apartments were less likely to have a rain water tank and insulation, two areas where households in newer dwellings had higher proportions than households in older dwellings. Due to high relative standard error, it was not possible to explore these relationships further.

ENERGY AND WATER EFFICIENCY ELEMENTS OF NEWER DWELLINGS

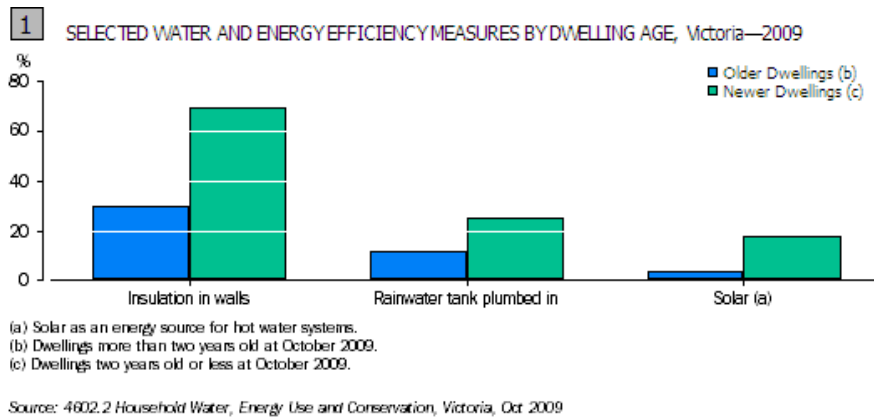
A greater proportion of households in newer dwellings had solar hot water systems, rainwater tanks plumbed into the dwelling and walls insulation than older dwellings.

Households in newer dwellings were more likely than households in older dwellings to have their rainwater tank plumbed into the dwelling. 25% of households in newer dwellings had a rainwater tank plumbed into their dwelling whereas 12% of households in older dwellings had the same. However, households in newer and older dwellings showed no statistically significant difference for having a rainwater tank overall (37% and 29% respectively).

Households in newer dwellings were more likely than older dwellings to have solar as a source of energy for heating water. 18% of households in newer dwellings had solar energy, compared with 3.8% of households in older dwellings.

Regulations state that all new Victorian dwellings cannot be approved without either a solar hot water system or a rainwater tank, which has been in effect since 2005. ABS estimates (above) were from a sample survey asking respondents whether or not the dwelling they resided in had these items. Statistics from 2008 new domestic building permits indicated higher rates of both solar hot water systems (28%) and rainwater tanks (47%), but at a similar ratio to ABS estimates (Building Commission 2009) ([End Note 1](#)).

Households in newer dwellings with insulation (including households who had ordered but not yet installed insulation) were more likely to have insulated walls (69%) than households in older dwellings (30%) ([End Note 2](#)). In nearly all cases this was as well as having insulation in the roof or ceiling. However, overall, households in older and newer dwellings which had insulation made up similar proportions.

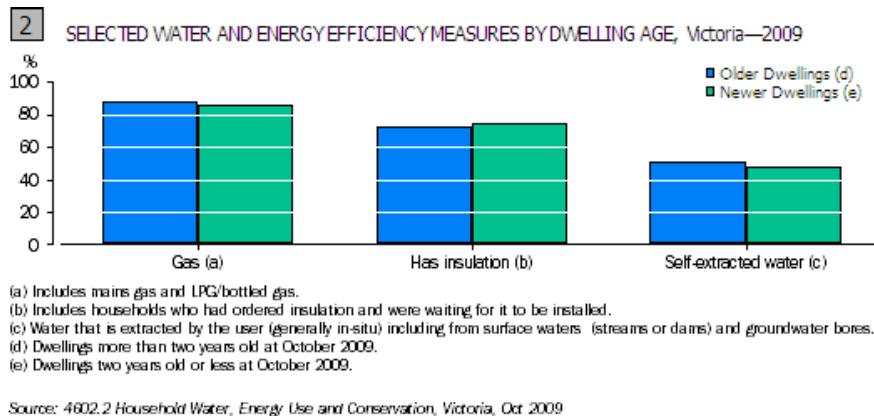


DIFFERENCES AND SIMILARITIES IN ENERGY AND WATER SAVING ELEMENTS OF OLDER AND NEWER DWELLINGS

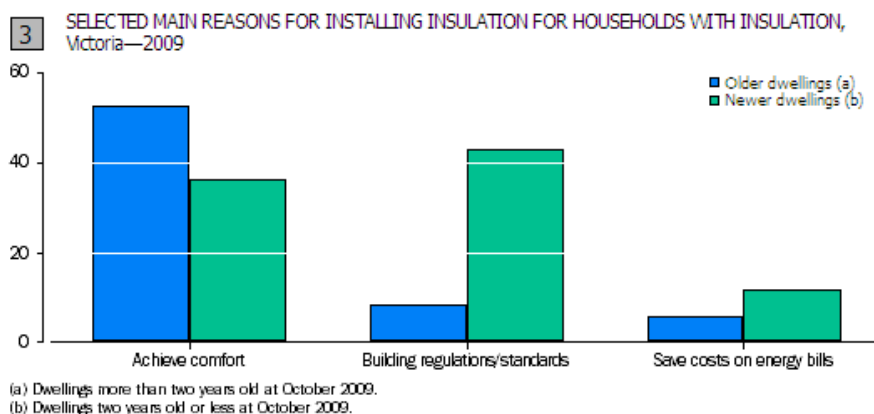
Households in older and newer dwellings showed similar rates of having alternative sources to mains water. 51% and 48% respectively had self-extracted water (water that is extracted by the user (generally in-situ) including from surface waters (streams or dams) and groundwater bores). Of the two main types of alternative water sources, households in older dwellings were more likely to have grey water (31%) than households in newer dwellings (22%) but both had about a third with rainwater.

For energy sources, households in older and newer dwellings had similar rates of gas as an energy source (including mains gas and LPG or bottled gas). Households in older dwellings had 88% and households in newer dwellings had 86% with gas.

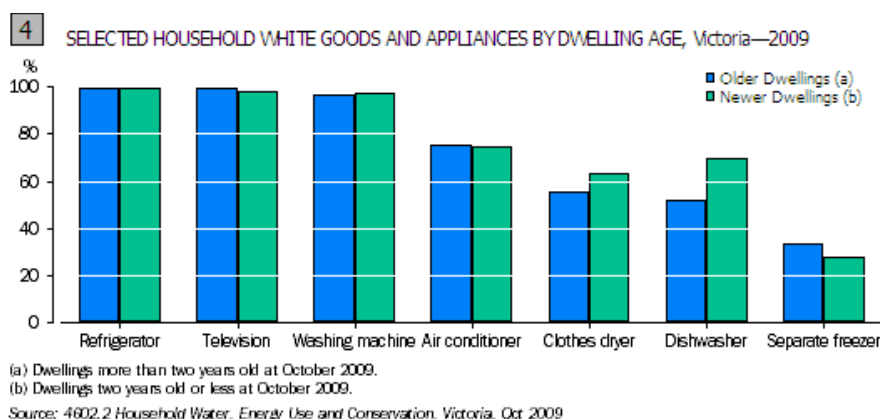
Households in older and newer dwellings had similar rates of insulation overall, with 72% of households in older dwellings and 75% of households in newer dwellings having insulation installed or ordered. Households in older and newer dwellings were equally likely to have roof or ceiling insulation (99%) (End Note 2).



Households in older and newer dwellings differed in their reasons for installing insulation. Households in older dwellings were more likely than households in newer dwellings to state the main reason for installing insulation as to achieve comfort (52% and 36% respectively). Households in newer dwellings were more likely to state their main reason for installing insulation as building regulations and standards (43%) than households in older dwellings (8.5%). Households in newer dwellings also had a higher proportion who stated their main reason for installing insulation was to save on the costs of energy bills (12%) compared to households in older dwellings (5.8%).



Households in older and newer dwellings both showed rates of over 95% for households with a washing machine and refrigerator. They also had similar rates for clothes dryers and separate freezers, but households in newer dwellings were more likely to have a dishwasher (69%) than households in older dwellings (52%). 75% of households in older and newer dwellings had an air conditioner and used it for similar amounts during the summer months. Almost all of households in older and newer dwellings had televisions. A higher proportion of households in older dwellings had a cathode ray television (CRT) (analog) (74%) than households in newer dwellings (53%) whereas a higher proportion of households in newer dwellings had LCD and plasma televisions (50% and 36% respectively) than households in older dwellings (36% and 23% respectively).



CONCLUSION

Households in newer dwellings had higher rates of insulation installed in the walls, solar energy for the hot water systems and rainwater tanks plumbed into dwellings than households in older dwellings. However, households in older dwellings and newer dwellings show similar proportions of self-extracted water, mains gas, insulation overall, household white goods and appliances and air conditioner ownership and use. Households in newer dwellings were more likely to have the water and energy efficiency elements they needed to reach government building standards but beyond these measures they were quite similar to households in older dwellings.

END NOTES

1 Building commission data classified new domestic buildings as including all new building work for domestic use, including dwellings, where regulations make environmentally sustainable building inclusion mandatory, but also includes fences, swimming pools and garages. A building permit allows for up to two years to commence approved works. [<back](#)

2 Questions relating to the location of insulation in the dwelling and reasons for installing insulation were only asked of households in dwellings with insulation (including households who had ordered but not yet installed insulation) and who were not renting. [<back](#)

REFERENCES

Australian Bureau of Statistics (ABS), 2009, *Housing Occupancy and Costs, 2007-08*, cat. no. 4130.0, viewed 20 July 2010, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/ABB5849D48BA5D7FCA2568A900139426?OpenDocument>>.

ABS, 2010, *Building Approvals, Australia, May 2010*, cat. no. 8731.0, viewed 20 July 2010, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/C39F34E5D80607C4CA2577730022A5DC?opendocument>>.

Building Commission, Better heating and cooling, 2004, 5 Star House, Building Commission, viewed 23 July 2010, <http://www.5starhouse.vic.gov.au/5_star_house_heating.htm>.

Building Commission, pulse° Building Intelligence 2008, 2009, Building Commission, viewed 20 July 2010, <http://www.pulse.buildingcommission.com.au/resources/documents/Pulse_Building_Intelligence_2008.pdf>.

COAG, National Strategy on Energy Efficiency, Draft Paper, 30 April 2009, COAG, viewed 23 July 2010 <http://www.coag.gov.au/coag_meeting_outcomes/2009-04-30/docs/National_strategy_energy_efficiency.pdf>.

DEWHA (Australian Government Department of the Environment, Water, Heritage and the Arts), Organisation for Economic Cooperation and Development (OECD), 13 November 2008, DEWHA, viewed 22 July 2010, <<http://www.environment.gov.au/about/international/oecd/index.html>>.

DEWHA, Intergovernmental Agreement on the Environment, 30 June 2010(a), DEWHA, viewed 22 July 2010, <<http://www.environment.gov.au/about/esd/publications/igae/index.html>>.

DEWHA, House Energy Ratings, NatHERS - Nationwide House Energy Rating Scheme, 10 January 2010(b), DEWHA, viewed 23 July 2010, <<http://www.nathers.gov.au/eer/index.html>>.

Ministerial Council on Energy (MCE), Communiqué, 14th Meeting of the MCE, 13 December 2007, MCE, viewed 22 July 2010, <http://www.ret.gov.au/Documents/mce/_documents/14th_Meeting_Communique20071213144531.pdf>.

History of Changes

This document was added or updated on 08/09/2010.

08 September 2010

Feature Article: Water and energy efficiency elements of households in older and newer dwellings amended due to incorrect hyperlinks within the reference.

Media Release: New homes environmentally efficient to meet building standards amended due to minor changes to text.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 This quarterly publication contains data from both ABS and non-ABS sources. The ABS publications referenced within **State and Regional Indicators, Victoria**, as well as the websites of non-ABS organisations, are listed in paragraphs 22 and 23. Users are directed to these references for further information.

REGIONAL AND SMALL AREA LABOUR FORCE ESTIMATES

2 The regions in Victoria for which the ABS produces estimates from the Labour Force Survey are revised at the time of the labour force sample redesign following each Census of Population and Housing and remain stable until the next labour force sample redesign. From November 2007, these regions are consistent with the SRs in the 2006 Edition of the ASGC. Consequently, the LGA boundary change between Melbourne (C) and Moonee Valley (C) is not reflected in LFS data. There were no changes to Victorian SR boundaries between 2001 and 2006 that involved population. For further information on LFS data at regional level, please see Information Paper: Regional Labour Force Statistics (cat. no. 6262.0). Maps of SRs used in the LFS can be found in Australian Labour Market Statistics, Jul 2009 (cat. no. 6105.0) on the Downloads page (6105.0 - Labour Force Region Maps - Victoria - 2007).

3 The quarterly small area unemployment rate estimates produced by DEEWR are based on the regions used by the ABS in the LFS. Even though there were no changes to Victorian SR boundaries between 2001 and 2006, there have been changes to LGA boundaries involving population which may have impacted on the small area unemployment rate time series. These boundary changes have been incorporated into the estimates for the smoothed series (the series included in this publication) from September quarter 2008, and have not been backcast to earlier periods. In Victoria, the affected LGAs are:

- Alpine (S) - previously included Falls Creek and Mount Hotham Alpine Resorts (estimated resident population of 163 at 30 June 2003);
- Benalla (RC) - previously part of Delatite (S);
- Mansfield (S) - previously part of Delatite (S); and
- Unincorporated Vic. - previously only French Island, now includes Falls Creek, Mount Baw Baw, Mount Buller and Mount Hotham Alpine Resorts.

4 Changes to SLA boundaries between 2001 and 2006 have affected the timing of the introduction of new LFS population benchmarks based on the 2006 Census of Population and Housing into the small area unemployment rate time series for the LGAs of Baw Baw (S), Campaspe (S), Colac-Otway (S), Greater Bendigo (C), Knox (C), Whittlesea (C) and Yarra Ranges (S). For these LGAs, the new benchmarks have been incorporated from September quarter 2008, which is two quarters later than other LGAs. The new benchmarks for Alpine (S) and Unincorporated Vic. have also been introduced from September quarter 2008.

5 The boundary changes to geographic areas and new population benchmarks described above were first introduced into the small area unemployment rate time series in March quarter 2009, with data for previous periods being revised back to either March quarter 2008 or September quarter 2008.

SMALL AREA ESTIMATES OF PERSONAL INCOME

6 Estimates at small area level (including SLAs and LGAs) of the personal income people received from various sources for each year from 2003-04 to 2006-07 have recently been compiled by the ABS from aggregate data sourced from the Australian Taxation Office's (ATO) Individual Income Tax Return Database. The ATO database covers all individuals who submit an individual income tax return and includes persons with income from one or more of a range of sources such as wages and salaries, own business, superannuation and annuity, investments and government pensions, benefits or allowances. The data items compiled by the ABS using the ATO statistics relate to income standards the ABS uses for its income surveys and are defined in the Explanatory Notes of Estimates of Personal Income for Small Areas, Time Series, 2003-04 to 2006-07 (cat. no. 6524.0.55.002). Government pensions, benefits or allowances have been excluded from the scope of the ABS-compiled statistics. Downloadable data can be accessed from the Downloads page of that publication.

7 All individual income tax statistics provided to the ABS by the ATO have been in aggregated form only, at the SLA level. Information about individual taxpayers has not been released to the ABS.

8 Prior to being provided to the ABS, the statistics have also been subjected to a confidentiality process that randomly adjusts table cells with small values. This includes altering some small cells to zero. Caution should therefore be exercised in deducing that there are no people in an area with certain characteristics and, in general, no reliance should be placed on table cells with small values. The confidentiality process prevents the risk of inadvertently releasing any information that may identify an individual while preserving the overall information value of the statistics.

TOURISM REGIONS

9 Tourism Regions are defined by relevant state/territory tourism organisations and represent groups of SLAs. Each year, any changes to Tourism Regions (including SLA boundary changes incorporated in the current edition of the ASGC) are applied from the first reference period of the Survey of Tourist Accommodation in the following calendar year (i.e. the March quarter). For a map of Victorian Tourism Regions, and a listing of SLAs within each Tourism Region, please see [Tourism Region Maps and Concordance Files, Australia](#) (cat. no. 9503.0.55.001).

AIR QUALITY

10 The Environment Protection Authority (EPA) reports air quality as an index for any given pollutant as its concentration expressed as a percentage of the relevant standard. It enables easy interpretation of whether the pollutant is at a level which may cause harm. An index value of 100 means the pollutant is currently at a concentration equal to the National Environment Protection Measure (Air NEPM) or State Environment Protection Policy (The Air Environment) (SEPP) standard levels (levels designed to protect human health and the environment). Indexes are calculated separately for each measured pollutant: Ozone, Nitrogen Dioxide, Sulfur Dioxide, Carbon Monoxide, Fine Particulates (PM10), Visibility (Airborne Particle Index). For each station, the daily pollutant indexes are the maximum index values for that day. Note that not all pollutants are measured at each station. The EPA also calculates an overall Air Quality Index, which amalgamates each pollutant index into an overall measure of air quality at each station.

11 The air quality data have been provided for the Ozone and Visibility (or Airborne Particle) Indexes as these are the dominant pollutants and are widely measured across the EPA network. It should also be noted that meteorological conditions are a major determinant on the incidence of elevated pollutant levels. Hence significant daily, seasonal and annual variations can be expected in air quality. For more information on air quality, see the [EPA web site](#).

12 The air quality index is converted into a qualitative scale with five commonly understood terms. Very good (0-33), Good (34-66) and Fair (67-99) represent measurements within the standards, while Poor (100-149) and Very poor (150+) represent measurements exceeding the standards.

13 For air quality reporting purposes the Port Phillip Region (PPR) has been divided into 4 regions: East, West, City and Geelong. Air monitoring stations assigned to each region are: East - Alphington, Brighton, Box Hill, Dandenong, Mooroolbark; City - RMIT, Richmond; West - Footscray, Melton, Point Cook, Paisley; Geelong - Point Henry, Geelong South. In addition, the Latrobe Valley has stations at Moe and Traralgon. The regional index is considered to be the maximum of the station indexes calculated within each particular region. The daily index reported for a region is the maximum region index recorded each day.

CHANGES IN CAPACITY OF WATER STORAGES

14 The capacity at full service level of Victoria's water storages changes periodically due to a number of factors including the commissioning and decommissioning of reservoirs, and the review of operational storage capacities of reservoirs. A summary of changes affecting capacity at full service level is given below.

- **December 2004:** Capacity of storages in Werribee and Maribyrnong basins reduced by 7 GL;
- **April 2005:** Capacity of Glenelg/Wimmera basin storages reduced by 24 GL;
- **January 2007:** Moondarra Reservoir (capacity 30 GL, initial storage volume 23 GL) added to the Thomson/Latrobe basin;
- **September 2008:** Glenmaggie Reservoir (Thomson/Latrobe basin) capacity reduced by 12 GL;
- **April 2009:** Lake Mokoan (Broken basin, capacity 365 GL) decommissioned;
- **June 2009:** Tarago Reservoir (capacity 38 GL, initial storage volume 22 GL) added to the Melbourne supply system.

MELBOURNE METROPOLITAN AREA

15 Most of the small area data provided by non-ABS organisations are aggregates at Local Government Area (LGA) level. With one exception, LGAs do not cross Statistical Division (SD) boundaries, and therefore it is generally possible to form SD data from aggregate LGA data. However, while the majority of the Yarra Ranges (S) LGA is in the Melbourne SD, the Yarra Ranges (S) - Pt B SLA is in the Gippsland SD. As a result, in these instances it is not possible to derive data for Melbourne and Gippsland SDs as exactly defined in the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0).

16 Where necessary, the Yarra Ranges (S) LGA as a whole is included with the LGAs in Melbourne SD to form

a region referred to as the Melbourne Metropolitan Area (MMA). Consequently, in these instances Gippsland SD excludes Yarra Ranges (S) - Pt B SLA.

17 As an indication of the relative size of Yarra Ranges (S) - Pt B SLA, at 30 June 2008 it had a preliminary estimated resident population (ERP) of 612 persons. At the same date, the total ERP of Yarra Ranges (S) LGA was 146,886, while Gippsland SD had a total ERP of 170,779.

GEOGRAPHY AND MAPS

18 Maps of SLAs, SSDs and SDs within Victoria can be found in [Australian Standard Geographical Classification](#) (ASGC) (cat. no. 1216.0) on the Downloads page (1216.0 - 2009 ASGC - Victorian Maps). A listing of SLAs within each LGA (Local Government Areas and Statistical Local Areas - Alphabetic) can be accessed from the same page, along with listings of SLAs within each SD (Main Structure - Detailed) and Statistical Region (SR) (Statistical Region Structure - Detailed).

19 Unless otherwise indicated, boundaries of LGAs, SDs and SRs referred to in this publication are consistent with those in the 2009 Edition of the ASGC. The most recent change to an LGA boundary in Victoria was effective from 1 July 2008 and involved Melbourne (C) gaining 111.8 hectares (and 5,712 persons based on preliminary ERP at 30 June 2008) from Moonee Valley (C).

Thematic maps

20 This publication contains maps illustrating selected characteristics relating to the population in LGAs. For each map, five class intervals, each with a different colour shade, have been used to help interpret the distribution of the characteristic being mapped. LGAs with similar values are grouped in the same class, and the number of LGAs in each class will vary depending on the distribution of the population being mapped.

21 Each map contains a legend showing the colour and values for each class of the mapped data. For simplicity, the ranges are shown as, for example, '9.7-16.3' and '16.3-23.0'. These should be read as 'from 9.7 to less than 16.3' and 'from 16.3 to less than 23.0'. Individual values appear in one range only.

ABS PUBLICATIONS

22 The following ABS publications are referenced in this release of **State and Regional Indicators, Victoria**:

- **Retail Trade, Australia** (cat. no. 8501.0)
- **Labour Price Index, Australia** (cat. no. 6345.0)
- **Sales of New Motor Vehicles, Australia** (cat. no. 9314.0)
- **Australian Demographic Statistics** (cat. no. 3101.0)
- **Births, Australia** (cat. no. 3301.0)
- **Deaths, Australia** (cat. no. 3302.0)
- **Labour Force, Australia** (cat. no. 6202.0)
- **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001)
- **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003)
- **Average Weekly Earnings, Australia** (cat. no. 6302.0)
- **Australian National Accounts: National Income, Expenditure and Product** (cat. no. 5206.0)
- **Consumer Price Index, Australia** (cat. no. 6401.0)
- **House Price Indexes: Eight Capital Cities** (cat. no. 6416.0)
- **Building Activity, Australia** (cat. no. 8752.0)
- **Building Approvals, Australia** (cat. no. 8731.0)
- **Engineering Construction Activity, Australia** (cat. no. 8762.0)
- **Tourist Accommodation, Small Area Data, Victoria** (cat. no. 8635.2.55.001)
- **Livestock Products, Australia** (cat. no. 7215.0)
- **Livestock and Meat, Australia** (cat. no. 7218.0.55.001)
- **International Trade in Goods and Services, Australia** (cat. no. 5368.0)

NON-ABS WEBSITES

23 The websites of the following organisations may provide further information on some of the data provided in this release of **State and Regional Indicators, Victoria**:

- [Department of Education, Employment and Workplace Relations \(DEEWR\)](#)
- [Dairy Australia](#)
- [Environment Protection Authority, Victoria](#)
- [Department of Sustainability and Environment, Victoria](#)

Glossary

GLOSSARY

Chain volume measures

Annually-reweighted chain Laspeyres volume price indexes referenced to the current price values in a chosen reference year (i.e. the year when the quarterly chain volume measures sum to the current price annual values). Chain Laspeyres volume measures are compiled by linking together (compounding) movements in volumes, calculated using the average prices of the previous financial year, and applying the compounded movements to the current price estimates of the reference year.

Generally, chain volume measures are not additive. In other words, component chain volume measures do not sum to a total in the way original current price components do. In order to minimize the impact of this property, the ABS uses the latest base year as the reference year. By adopting this approach, additivity exists for the period following the reference year and non-additivity is relatively small for the years immediately preceding. A change in reference year changes levels but not growth rates, although some revision to recent growth rates can be expected because of the introduction of a more recent base year (and revisions to the current price estimates underlying the chain volume measures).

Deficit and surplus

A deficit occurs when the sum of all debit entries exceeds the sum of all credit entries, and a surplus occurs when the sum of all credit entries exceeds the sum of all debit entries. The term deficit (or surplus) can therefore be used in relation to various balances, e.g. balance of trade.

Duration of unemployment

The elapsed period to the end of the reference week since a person began looking for work, or since a person last worked for two weeks or more, whichever is the shorter. Brief periods of work (of less than two weeks) since the person began looking for work are disregarded.

Employed

Persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers);
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers);
- were employees who had a job but were not at work and were:
 - away from work for less than four weeks up to the end of the reference week;
 - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week;
 - away from work as a standard work or shift arrangement;
 - on strike or locked out;
 - on workers' compensation and expected to return to their job;
- were employers or own account workers who had a job, business or farm, but were not at work.

Liquid crystal display (LCD)

Liquid crystal display is display technology that uses rod-shaped molecules (liquid crystals) that flow like liquid and bend light.

Liquefied petroleum gas (LPG)

Liquefied petroleum gas (LP Gas or autogas) is the generic name for mixtures of hydrocarbon (mainly propane and butane). It is used as a fuel in heating appliances and vehicles, and increasingly replacing chlorofluorocarbons as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.

Part-time workers

Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

Particles as PM₁₀

Particles with an aerodynamic diameter of 10 micrometres or less.

Photochemical oxidants and ozone

'Photochemical oxidants' is the technical term for the type of smog found in Australian cities during the warmer months of the year. This type of smog can be invisible or it can appear as a whitish haze.

Photochemical oxidants are formed when sunlight falls on a mixture of chemicals in the air. Ozone is one of the main photochemical oxidants. Other chemicals such as formaldehyde are also found and, like ozone, have adverse health effects. Environment agencies measure the level of ozone because it indicates the total amount of photochemical oxidants in the air. Cities that have abundant sunshine over periods of time, together with moderate winds and high temperatures, are most likely to experience high levels of photochemical oxidants.

Ozone is a gas that is formed when nitrogen oxides react with a group of air pollutants known as 'reactive organic substances' in the presence of sunlight. The chemicals that react to form ozone come from sources such as: motor vehicle exhaust, oil refining, printing, petrochemicals, lawn mowing, aviation, bushfires and burning off. Motor vehicle exhaust fumes produce as much as 70% of the nitrogen oxides and 50% of the organic chemicals that form ozone. (Source: Australian Government Department of the Environment, Water, Heritage and the Arts, <<http://www.environment.gov.au>>)

Re-exports

Re-exports are defined as goods, materials or articles originally imported into Australia which are exported in either the same condition in which they were imported, or after undergoing some minor operations (e.g. blending, packaging, bottling, cleaning and sorting) which leave them essentially unchanged. Included in international merchandise export statistics.

Seasonal adjustment

A means of removing the estimated effects of normal seasonal variations from economic time series so that the effects of other influences are obvious. Seasonal variations are the systematic (though not necessarily regular) intra-year movements of economic time series. These are often the result of non-economic phenomena, such as climatic changes and regular religious festivals (e.g. Christmas and Easter).

State final demand

Conceptually identical to domestic final demand at the national level (the sum of private and government final consumption expenditure and private and public gross fixed capital formation).

National estimates are based on the concepts and conventions embodied in the System of National Accounts, 1993, but for regional (including state) estimates there is no separate international standard. Although national concepts are generally applicable to state accounts, there remain several conceptual and measurement issues that either do not apply or are insignificant nationally. Most of the problems arise in the measurement of gross state product for the transport and storage, communication services, and finance and insurance industries, where production often takes place across state borders. In these cases, a number of conceptual views can be applied to the allocation of value added by state. For more information, see chapter 28 of Australian System of National Accounts: Concepts, Sources and Methods (cat. no. 5216.0).

Trend estimates

Smoothing seasonally adjusted series produces a measure of trend by removing the impact of the irregular component of the series. The trend estimates are derived by applying a 13-term Henderson weighted moving average to the respective seasonally adjusted series. Readers are reminded that trend estimates are subject to

revision as subsequent months' data become available.

Unemployed

Persons aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and:
 - were available for work in the reference week;
 - were waiting to start a new job within four weeks from the end of the reference week, and could have started in the reference week if the job had been available then.

Abbreviations

ABBREVIATIONS

'000	thousand
\$'000	thousand dollars
\$m	million dollars
ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC06	Australian and New Zealand Standard Industrial Classification, 2006 Edition
ASGC	Australian Standard Geographical Classification
Aust.	Australia
B	Borough
BoV	Balance of Victoria
BPM6	Balance of Payments and International Investment Position Manual, Sixth Edition
cat. no.	Catalogue number
C	City
COAG	Council of Australian Governments
CPI	consumer price index
DEEWR	Australian Government Department of Education, Employment and Workplace Relations
DPS	Department of Parliamentary Services
excl.	excluding
EPA	Environment Protection Authority
ERP	estimated resident population
FT	full-time
GL	gigalitres
LFS	Labour Force Survey
LCD	Liquid Crystal Display
LGA	local government area
LPG	liquefied petroleum gas
m	million
MSR	major statistical region
n.e.c.	not elsewhere classified
no.	number
NEPM	National Environment Protection Measure
NFEE	National Framework for Energy Efficiency
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
Pt	Part
qtr	quarter
Qld	Queensland
RC	Rural City
S	Shire
SD	statistical division
SDR	standardised death rate
SEPP	State Environment Protection Policy
SESCA08	Standard Economic Sector Classifications of Australia 2008
SITC	Standard International Trade Classification
SLA	statistical local area
SNA08	System of National Accounts 2008 version

SNA93	System of National Accounts 1993
SR	statistical region
UHT	ultra heat treated
Vic.	Victoria
WA	Western Australia

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence